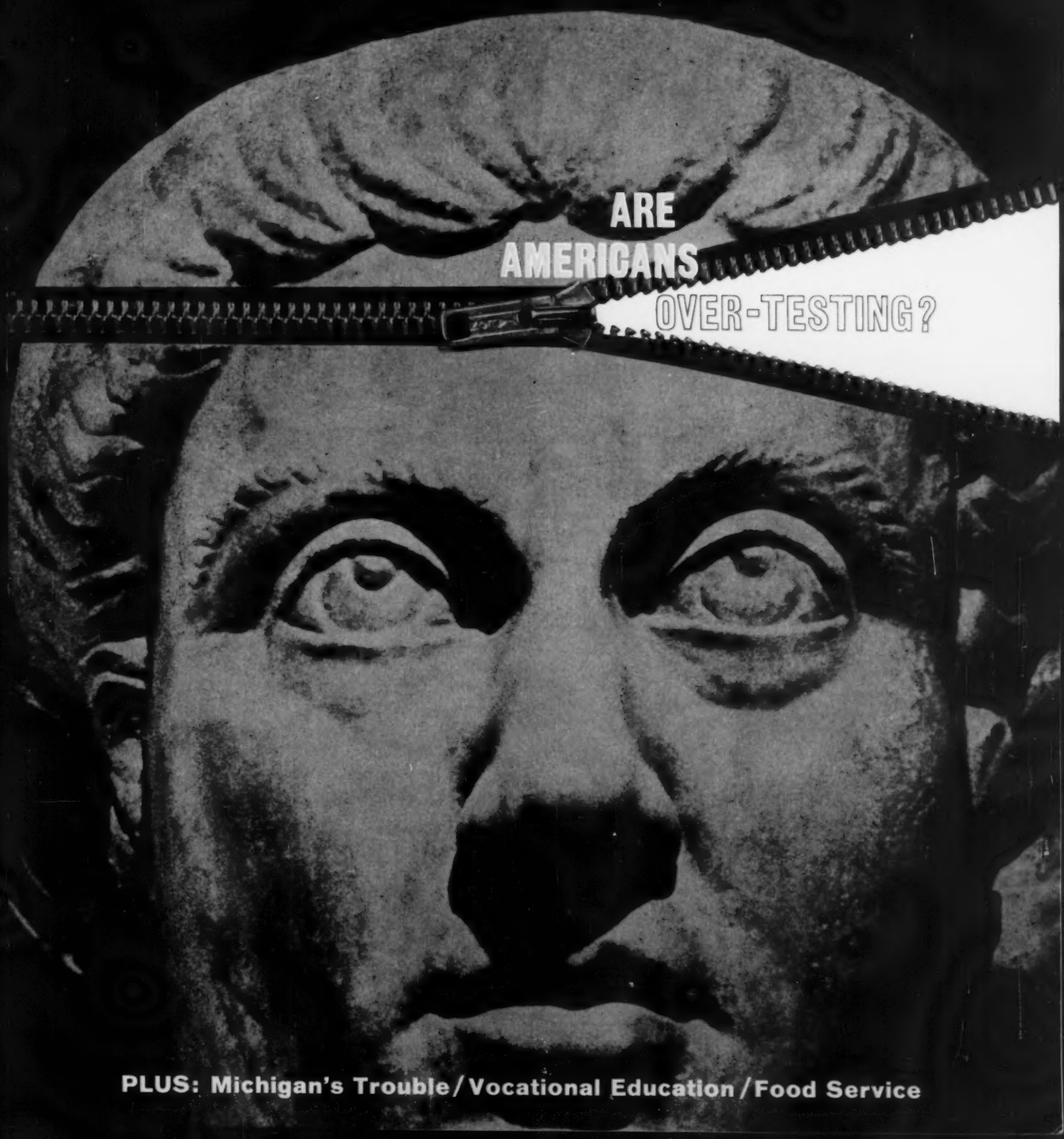
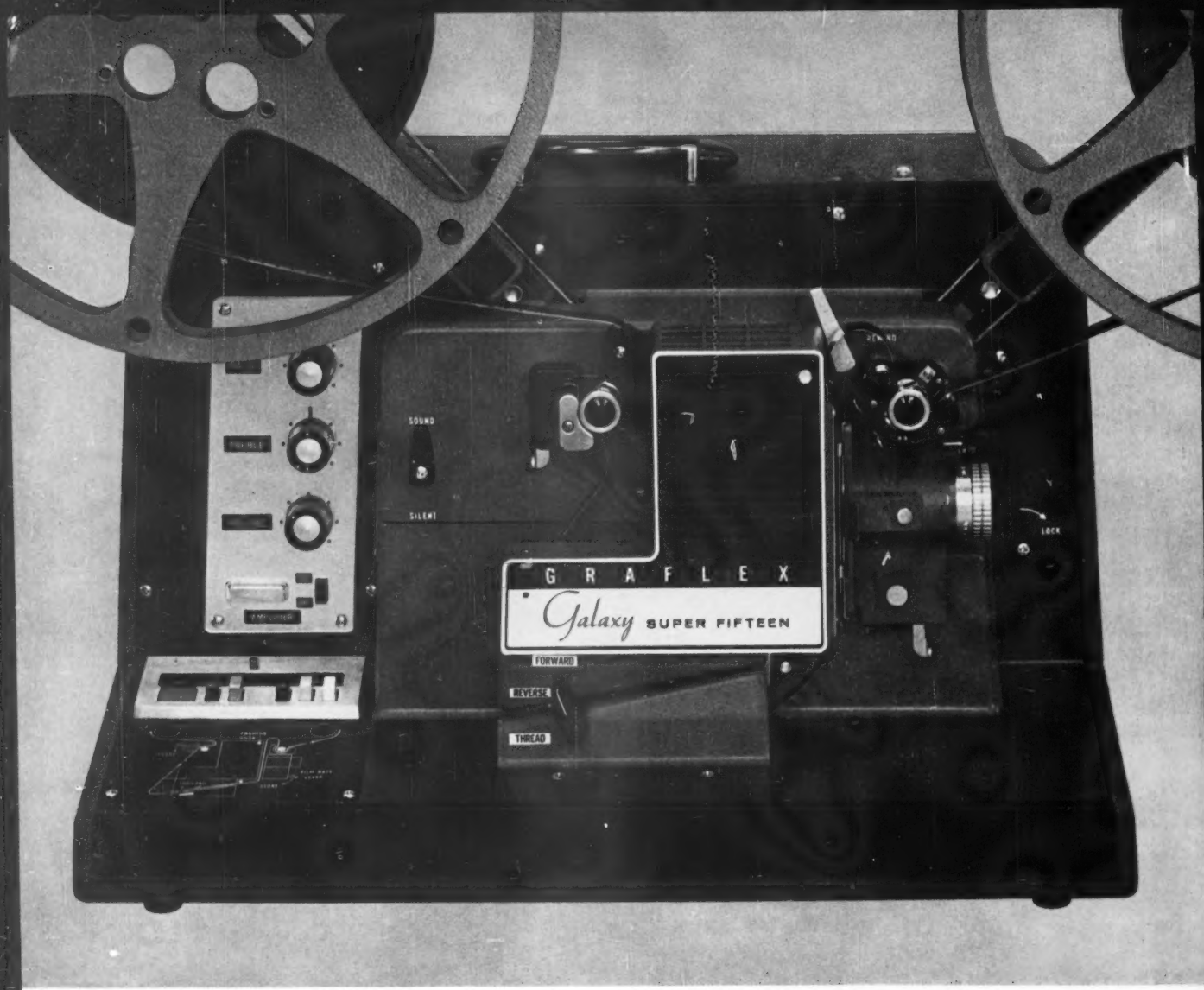
Educational Executives' August 1961

OVERVIEW

A BUTTENHEIM PUBLICATION



PLUS: Michigan's Trouble / Vocational Education / Food Service



*The proof is in its performance

Teachers, AV directors, school management people, and those whose very success depends upon the best presentation of their product . . . film *producers* . . . are unanimously enthusiastic about the performance of this remarkable new projector.

Such enthusiasm is more than justified, for no other 16mm projector even approaches the picture, or sound quality, or ease of operation of the Galaxy. Only a carbon arc delivers more brilliance . . . only a professional 35mm projector equals its sound quality . . . and only a simple silent projector is as easy to use.

Take a closer look! See how easy (and fast) it is to set up. Top mounted reel arms are permanently attached . . . fold for storage, yet snap into "running" position instantly. Speakers are contained in the lift-off cover for use at the projector or, for best sound distribution, at the screen.

And, for something you can get really enthusiastic about, look at the threading. On the Galaxy it's easier (and more positive) than any other sound projector. Flip a lever and the lens mount *slides* forward, opening the gate for quick, easy film positioning . . . just like a professional projector. Slide film in the diagonal slot, turn a lever, and the sound head is automatically threaded . . . automatically "looped" and in exact to-the-frame sync.

Brilliance . . . Galaxy is brighter than any other 16mm projector. A new, exclusive high-intensity lamp has allowed us to do away completely with dust-catching, light-stealing condensers, heat filters and external reflectors. *Two* light levels, provide the brilliance best suited to the projection conditions: Classroom? Use the "Normal" setting, extend lamp life up to 150 hours. Auditorium? Use the picture-bright "Hi" setting for brilliance greater than any other projector—at the touch of a button you select brilliance equal to either 800 or 1250 watts.

Circle **GV-201** on reply card, last page

SOUND HEAD THREADING IS GONE—FOR GOOD!

You can forget about sound loops, 26-frame leads, tension, idlers, equalizers . . . with the Galaxy you'll never have to thread a sound head again, nor wait while someone else does. Just slide the film into the wide diagonal slot and flip a single lever. You're all set to project . . . the film is in position . . . and in sync . . . in a second.

You owe it to yourself

to **SEE** the unequalled brilliance*

HEAR the unsurpassed sound*

TRY the unique operation*

of the **ALL-NEW** *Galaxy*® by **GRAFLEX**

With this increased brilliance the Galaxy represents the coolest operating projector ever designed. With our exclusive lamp only visible light is directed to the film . . . heat rays (which reach the film on other projectors) are diverted to the back of the lamp housing and harmlessly dissipated. This cooler light requires little shielding . . . provides brighter "still" pictures, too, than any other movie projector. And, it's a coolness you can actually feel. Put your hand in front of the lens, on the lamp housing, or anywhere on the projector . . . prove to yourself that the Galaxy *is* the coolest-operating projector ever designed.

With these features alone, Galaxy is the best on the market, but we've added more . . . the finest sound system of any 16mm projector. From the exclusive hiss-free phototransistor pickup to the full 15-watt high fidelity amplifier, it's an all-new system. And it delivers 50 to 15,000 cps response . . . far greater than the capacity of 16mm sound tracks . . . with distortion-free volume for any size audience. For the first time you get separate bass and treble controls for the most distinct speech. . . the most realistic music.

Push-buttons give you full finger-tip control of your screenings. And, when you have finished showing your film . . . relax! With Galaxy's simplified rewind you *don't* change reels, reel arms or belts. Just flip a lever, push a button and the film is quickly rewound.

See for yourself the unique brilliance . . . hear the outstanding sound quality . . . and witness the new operating simplicity of which only the Galaxy is capable. Ask your Graflex AV dealer for a demonstration or, if you prefer, drop us a note and we will have our representative contact you. Audiovisual Department, Graflex, Inc., Rochester 3, N. Y. In Canada: Graflex of Canada Limited, 47 Simcoe St., Toronto 1, Ont.

GRAFLEX®

A SUBSIDIARY OF GENERAL PRECISION EQUIPMENT CORPORATION

LETTERS

Teaching Machines

. . . We fool ourselves and our constituents if we keep saying that teaching machines will not replace teachers ["The Teacher in the Automatic Box," June]. If curriculum development is sound and the mechanisms are reliable and versatile, machine instruction will displace human instruction. This is like patting the dog on his head, hoping he will go away —meanwhile he keeps growing larger! . . .

We have not yet formally announced the entry of our company's product line. While we have been quietly working with teaching machines since 1956, it is precisely because of this experience that we have approached the market with caution, knowing full well that hardware must be low in cost, reliable, and flexible. But above all, it must be designed for the learner's needs, not the purposes and objectives of engineers and marketeers. . . .

LEONARD C. SILVERN, Education and Training Research Director, Videosonic Systems, Hughes Aircraft Co., Los Angeles

Negro in Administration

. . . I have just finished reading "The Negro in Administration" in the June issue. I just wanted to mention that in the public school system in the District of Columbia there are two Negro assistant superintendents who have been assigned without regard to race since 1955—Francis A. Gregory who is in charge of adult education, vocational education, and summer schools, and Edith Lyons who is in charge of the elementary schools. These are city-wide assignments—which maybe would have been worthy of mention in an article of this type. . . .

LEMUEL A. PENN, Principal, Phelps Vocational High School, Washington, D. C.

. . . It was an excellent piece. . . .

JOHN LESLIE, for Secretary of Labor ARTHUR J. GOLDBERG, U. S. Department of Labor, Washington 25, D. C.

What Are Schools For?

Frequently your editorials find me on opposite sides of the issue, but the question you posed in the July issue ["What Are Schools For?" *One View*] found me in complete agreement.

Within the past year a local suburban school district formed a "Citizens Advisory and Study Committee" to take a good long look at our schools. The Committee immediately divided itself into three groups: finance, facilities, and curriculum. It was, and is, my belief that any group studying curricula cannot do it intelligently until they have answered your question. In repeated attempts to get some consent to an answer to this question, I was repeatedly thwarted by other committee members. They went plunging into the current curricula and asked such questions as, "Why can't we have a foreign language program in our elementary school?" "Why doesn't this elementary school have a greater physical education program?" "Why don't we have an instrumental program at our elementary school?"

No one seemed to think it was necessary to determine why there should be any particular program in any particular school. The sole criteria was one of establishment.

Educational Executives'

OVERVIEW

A Buttenheim Publication

OVERVIEW is published monthly by the Buttenheim Publishing Corporation, 470 Park Avenue South, New York 16, New York. Accepted as controlled circulation at Lancaster, Pa. Subscription rates: U. S. and Canada—$5 a year; $1 per copy. Foreign—$8 a year. Member of Educational Press Association.

EDGAR J. BUTTENHEIM
Chairman, Board of Directors

DONALD V. BUTTENHEIM
President and Publisher

G. E. CARNEY, *Treasurer*

G. W. HARRIS, *Director of Circulation*

JAMES R. STACK, *Advertising Sales Manager*

FRANK H. LAAVY

CHARLES M. MITCHELL

G. ROGERS PORTER

Branch Offices

CHICAGO: *400 W. Madison St., Chicago 6, Ill. FInancial 6-6411.* JAMES F. MURPHY, JOHN A. RAYMOND

CLEVELAND: *1814 Superior Bldg., Cleveland 14, Ohio. CHerry 1-1755.* WILLIAM L. BLACK

LOS ANGELES: *1870 Hillhurst Ave., Los Angeles 27, Calif. NOrmandy 5-5143.* ALBERT T. MILLER

TENNESSEE: *121 N. Hermitage, Lookout Mountain, Tenn. TAylor 1-2853.* CURTIS R. BUTTENHEIM, *Southern Sales Mgr.*

ASSOCIATED PUBLICATIONS

Contractors and Engineers		The American City
Municipal Index	MART	AMERICAN SCHOOL AND UNIVERSITY

Who May Pass . . .

. . . and who may fail? Who should accept greater responsibility and who should take on less? These are questions which hover in the background of every classroom and school. Instructional staffs and administrators use a variety of tools to help answer those hard questions. This month, the editors take a look at testing to see if this valuable tool is being used in the best—or worst —interests of education. As you will see on pages 31–33, there is no hard-and-fast judgment. Instead, we point out those areas in which educators must roll up their sleeves and work out better solutions than are already available.

The impact of OVERVIEW articles is creating quite a stir in our offices. Already, in the first six months of 1961, we have filled twice as many reprint requests as we did during the twelve months of 1960. And orders for July's article on "The Downtown School" are only now beginning to pile up! As I look ahead to our fall schedule of articles, I believe that this pace will continue.

Donald V. Buttenheim

Publisher

"Other schools in the district have it, why can't we?" It did not seem important to the group to consider . . . what was trying to be accomplished through a particular program. . . .

DOUGLAS H. MUELLER, Secretary, Education Committee, Greater Detroit Board of Commerce, Mich.

Please accept my compliments on your outstanding editorial, "What Are Schools For?" Your concept of consent is the perfectly obvious answer which most of us wish we could have stated. . . .

BYRON F. EVANS, Superintendent of Schools, Saratoga Springs, N. Y.

Reprinting

The March 1961 issue of OVERVIEW has come to the attention of *Liberty*, a Magazine of Religious Freedom.

We would like to use the article titled "Church, State, and American Education" in one of the forthcoming issues of *Liberty*. May we have your permission? . . .

JEANNE REVERT, Editorial Secretary, International Religious Liberty Assn., Tacoma Park, Wash.

• *Ed.:* OVERVIEW *welcomes the opportunity to extend its information through other journals. Requests for reprinting should be addressed to the editor.*

Downtown School

The July '61 OVERVIEW reached my desk today. You merit a special "Hoya!" for its slick appearance and smart layout. I was particularly impressed with the report, "The Downtown School." We are interested in the possibility of reprints. If you can provide us with three hundred, we shall distribute them to all our pastors in Manhattan and The Bronx as well as in the larger cities of the seven up-state counties in the Archdiocese. . . .

VERY REV. MSGR. RAYMOND P. RIGNEY, Associate Superintendent of Schools, Archdiocese of New York, N. Y.

Circle **OV-204** on reply card, last page

THAT BOY AND GIRL

Are they doing their best?

If you could get across to them some new incentives, some stronger motivations, or if you could effect some changes in their attitudes toward school and toward life in general, what would they be?

Questionnaire

We asked this question of school administrators across the country. The replies to this questionnaire indicate the unanimous concern of school people in widely separated areas that too large a percentage of students in our secondary schools are fumbling their opportunities.

Will They Read It?

It is not too difficult to write good counsel. To get students to read it and act on it is the problem. We have put our counselling into a date book, utilizing the principle used by many business firms who keep their message before their clients by means of a complimentary book of this kind. The strategy that sells insurance and merchandise we have employed to sell constructive ideas to teenage pupils.

"My School Year"

This book, "MY SCHOOL YEAR", contains 40 pages of calendar, one for each week of the school year. A page of instructions tells the student how to use the book, not only as a reminder of the dates of athletic events, parties, dances, exams, special assignments, etc., but also as a diary, recording the interesting things that happen day by day, making it a book to be treasured throughout life.

Pointed Paragraphs

Interspersed among these calendar pages are pages of pointed, attention-getting paragraphs stressing a wise use of time, the necessity for hard work, dependability, integrity, goals, the importance of real learning, etc., etc., things we know from your answers to our questionnaire you would like to have said to your students.

An Attractive Book

This 64-page book is durably and attractively bound in heavy Jersey cordovan. Pages are 5½ x 8½ inches. The beauty and everyday utility of the book insure that it will be prized and its contents read and re-read.

We believe that "MY SCHOOL YEAR", placed in the hands of all your high school pupils, will be singularly effective in improving attitudes and stimulating effort.

Some Titles

Times Change
All Yours
Pre-flight
Hard Facts
Toward the Goal
To Be Popular
Managing Your Face
Square or Straight?
Good Grades
Chin Up
Do It Yourself
Look It Up
Good Property
Attention Please
Lucky Literates
Problem or Answer?
Law and Order

Order for your school from this advertisement at 55¢ each in quantities of 50 or more, or send $1.00 for a sample copy postpaid.

Institute For Personal Development North Manchester, Indiana
(More than 30 years in the field of educational publishing)

Institute For Personal Development
North Manchester, Indiana

Send me _____ copies of "MY SCHOOL YEAR" at 55¢ each.

☐ Bill me for the amount ($ _____) plus postage.

☐ I enclose check. You will pay the postage.

Name _____ Official Position _____

School _____ Address _____

City _____ State _____

Suggestion: Pupils will prize this book even more if they are asked to pay for it themselves.

Circle **OV-205** on reply card, last page

What a difference!...with Pratt & Lambert Cellu-Tone Satin

Here's bright new beauty for interior walls, woodwork, trim and furniture in a rich, semi-gloss alkyd coating.

The remarkable durability of Cellu-Tone Satin holds maintenance costs down. The beautiful finish *stays* that way, even through repeated hard scrubbings.

Fingerprints, dirt, grease, pencil and crayon marks, ink spots wipe or wash off quickly and easily without showing.

Cellu-Tone Satin is available in a wide variety of Calibrated Colors®. Try it for a beautiful difference *and a real saving in maintenance cost.*

(For chalkboards, use P & L Chalk Board Coating, Green.)

Use Pratt & Lambert...the brand most frequently specified by architects, acknowledged by painters to be definitely superior.

PRATT & LAMBERT-INC.

NEW YORK • BUFFALO • CHICAGO • FORT ERIE, ONTARIO

the paint of professionals for over a century

Educational Executives'

OVERVIEW

Vol. 2, No. 8 *August, 1961*

Editorial Staff

ARCHIBALD B. SHAW, *Editor*

THEODORE O. CRON, *Managing Editor*

L. KAREN BEACH, *Associate Editor*

JAMES BEIZER, *News Editor*

GEORGETTE MANLA, *Plant Editor*

WILLIAM K. RICHARDS, *Assistant Editor*

KAREN MARKMAN, *Assistant Editor*

INGE NACHMAN, *Research Secretary*

THEODOR SCHUCHAT, *Washington Correspondent*

OMER ANDERSON, *European Correspondent*

HAROLD F. CLARK, *Economic Analyst*

PATRICIA DOYLE, *Art Director*

HELEN E. WEYL, *Production Manager*

WALTER D. COCKING, *Editorial Consultant*

Editorial Advisory Board

Through 1961: W. W. CAUDILL, *Architect, Houston, Tex.;* JOHN E. CORBALLY, JR., *Coordinator, Ohio State U.;* JOHN H. FISCHER, *Dean, Teachers College, Columbia U.;* HAROLD B. GORES, *President, Educational Facilities Laboratories, Inc.;* JAMES G. HARLOW, *Dean, College of Education, U. of Oklahoma.;* LAWRENCE D. HASKEW, *Vice President, U. of Texas;* HENRY H. HILL, *President, George Peabody College for Teachers;* BRUCE MILLER, *Supt., Riverside, Calif.;* T. A. ROACH, *Supt., Andrews, Tex.;* ARTHUR B. SHEDD, *Prin., Fox Lane School, Bedford, N. Y.;* L. H. SHEPOISER, *Supt., Wichita, Kans.;* O. MEREDITH WILSON, *President, U. of Minn.*

Through 1962: JAMES E. ALLEN, *Commissioner of Education, N. Y.;* RIDGELY M. BOGG, *Asst. Supt., Great Neck, N. Y.;* JOHN B. CHAFFEE, *Supt., Wellesley, Mass.;* CLIFFORD M. HARDIN, *Chancellor, U. of Neb.;* VAN MILLER, *Professor of Education, U. of Ill.;* HERBERT H. SWINBURNE, *Architect, Philadelphia*

Through 1963: PAUL CRUIKSHANK, *Headmaster, Taft School, Watertown, Conn.;* ANDREW A. DALY, *Mgr., Dept. of Ed., IBM;* JOHN W. HAROLD, *Supt., Cedar Falls, Iowa;* CHARLES R. SPAIN, *Supt., Albuquerque, N. M.;* RICHARD F. TONIGAN, *Plant Mgr., Teachers College, Columbia U.*

Through 1964: HARRY S. BELMAN, *Chairman, Industrial Ed., Purdue U.;* GEORGE B. BRAIN, *Supt., Baltimore;* VINCENT J. DODGE, *Prin., Roosevelt School, Fargo, N. D.;* JOSEPH O. LORETAN, *Assoc. Supt., Jr. H. S. Div., N.Y.C.;* MAURICE F. SEAY, *Dir., Div. of Ed., W. K. Kellogg Foundation;* O. ALVIN WILSON, *Asst. Supt., Oak Park, Ill.*

Moving Day for the U. S. Office 28
Report from Washington

Are Americans Over-Testing? 31
An analysis of one of the toughest problems in education

Basic Choices in Vocational Education 34
EDWARD HANKIN

Michigan Has a Date with Chaos 36
STUART GROSS

Gobbledygook: The Art of Non-Think 38
HERMAN SPIVEY

Pragmatic Planning in a Boom Town 40
Report of Sarasota's Building Decade

Education for Creativity 44
PART IV: NORMAN DELLO JOIO

Lower-Cost, Higher-Voltage Electrical System 46
MARK EITINGON

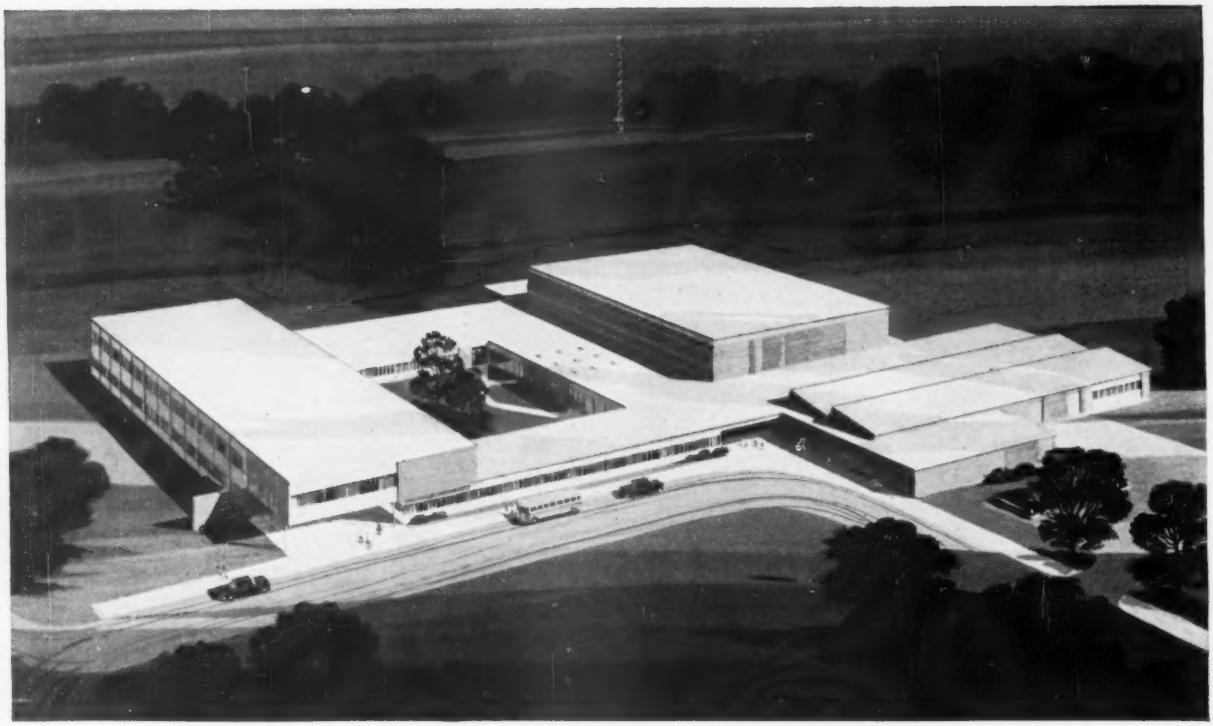
Yesterday's Schoolhouse 48
Nostalgic photo essay

The Lunch Schoolroom 50
JOHN PERRYMAN

Cover by Franznick-Medén

Features

Publisher's Memo 4
Letters 4
One View, ARCHIBALD B. SHAW 11
Forum 12
Economic Scene 14
Calendar 18
Late News 19
Close-ups: Hugh Hussey 23
Searching Through Research, ELLIS HAGSTROM 26
Executive's Bookshelf 51
Plant News 54
Education Roundup 57
As I See It, WALTER D. COCKING 63
Product Preview 64
Product Literature 71



In the new Batavia Senior High School, Batavia, New York...

NEW CARRIER HEATING AND VENTILATING SYSTEM PROVIDES 8 MAJOR ADVANTAGES YET COSTS LESS

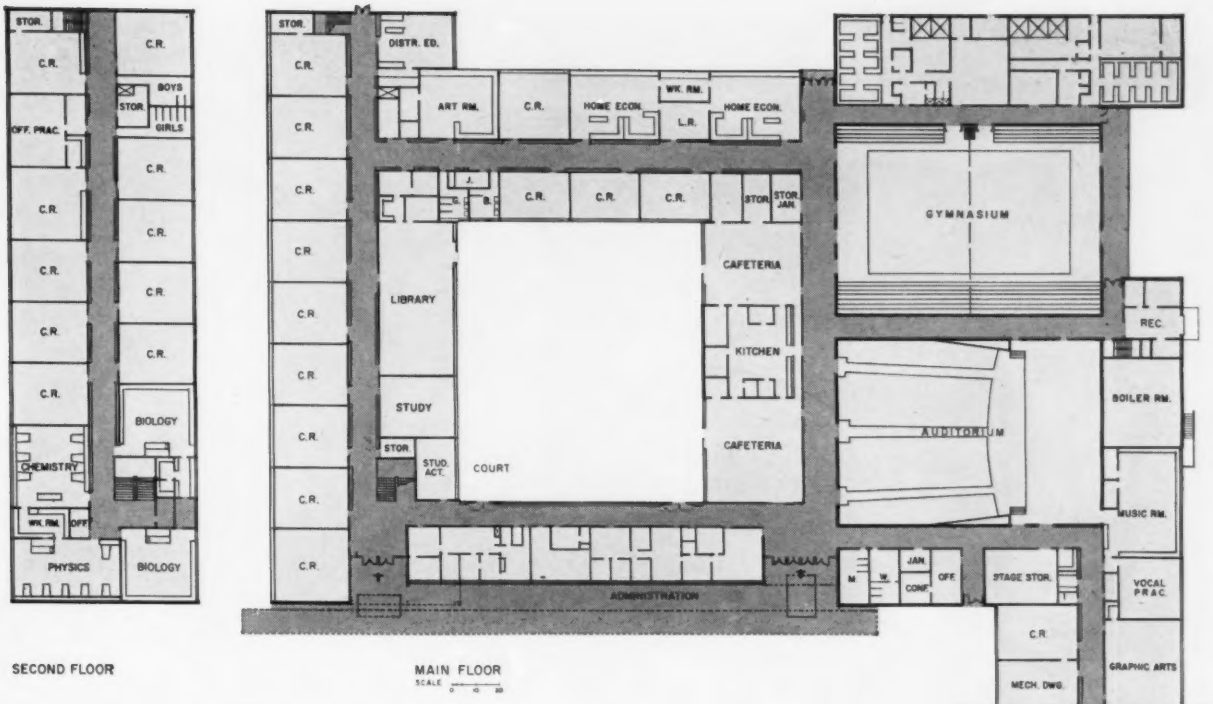
This modern high school offers an excellent example of how any new school can enjoy a superior heating and ventilating system at less than the cost of ordinary unit ventilators. And this new kind of system is ready for immediate conversion to year-round air conditioning with the simple addition of packaged refrigeration equipment in the machine room.

In planning Batavia Senior High, the designers considered unit ventilators and several popular central station systems. They carefully compared the performance characteristics, maintenance requirements, first cost and operating cost of each method. Their conclusion: The new Carrier Reheat Weathermaster* System provides the highest quality automatic heating and ventilation currently available to schools. It is the easiest to convert to complete year-round air conditioning. It costs 10% less, installed, than the next best method. And it costs less to operate and to maintain than other automatic systems.

The eight important advantages of the Reheat Weathermaster System which led to these conclusions are listed on the opposite page. They are unique because these Carrier units are the only room terminals which combine the performance benefits of the induction principle with either high or low velocity air distribution and the superiorities inherent in all central station systems.

If you are planning a new school, it should be well worth your while to look into the Carrier Reheat Weathermaster System—either for heating and ventilation only, or with an eye to future air conditioning. The nearby Carrier office will be glad to give you, your architect and consulting engineer complete facts on the system. Or you may write to Carrier Air Conditioning Company, Syracuse 1, N.Y.

*Reg. U.S. Pat. Off.



Batavia Senior High School has classroom space for 850 pupils and auxiliary facilities for over 1000. Building includes 36 classrooms, art rooms, science rooms, homemaking suites, music rooms and vocational shops. Each academic department has a conference room. Also provided are administration offices, health and guidance facilities, and student activities center. Two-station gymnasium provides bleachers to seat 1200. Boys' and girls' locker facilities also include a team room. Two cafeterias and a teachers' dining room are separated by a large kitchen. The auditorium seats 950. Gross area—109,644 sq. ft. ***Architects and Engineers:*** **Sargent, Webster, Crenshaw & Foley, A.I.A., Syracuse, N.Y.**

Only the Carrier Reheat Weathermaster System offers these 8 advantages for heating and ventilating

1 Positive ventilation and air circulation under all conditions and seasons for improved odor dilution. Constant air volume from units.

2 Quieter operation—no fans or other moving equipment in classrooms, with all powered equipment located in machine room for easy servicing.

3 Superior air filtering at central station—minimum filter maintenance.

4 No costly wall openings, subject to rain and wind leakage, required in classrooms for ventilation air.

5 No operation of fans required for night and week-end heating, with gravity heating handling the load.

6 Individual temperature control in every room solves zoning problems; air damper assures easy initial system balancing, requires no adjustments thereafter.

7 Valuable classroom floor and wall space is saved by the compact units; cabinet only eight inches deep.

8 Easily and economically converts to full-year-round air conditioning at any future date with simple addition of packaged water chilling machine in central apparatus room. No revision of classroom units, controls or air ducts required. Condensate drains not needed. Nominal conversion cost about 65c per sq. ft., or less.

Carrier ***Air Conditioning Company***

THE TORNADO 280

runs without a ripple!

CONCENTRIC ACTION—the reason for Tornado's smoothness—makes a big difference, *in many ways*, on any floor cleaning or polishing job. By design, more work-power is delivered directly *and evenly* to the work-surface. Operators *naturally* do a better job—faster! *No machine fighting*, no work fatigue! Bucking, whipping and vibration are gone. Perfect weight distribution is part of the story behind Concentric Action. The full facts prove Tornado your soundest investment.

Stroboscopic photo captures remarkably smooth, balanced-motion of Tornado floor maintenance machine.

Pick your toughest job . . . see an action demonstration of the TORNADO 280. You supply the water, *we'll supply the glass!*

ATTACH TO YOUR LETTERHEAD AND MAIL

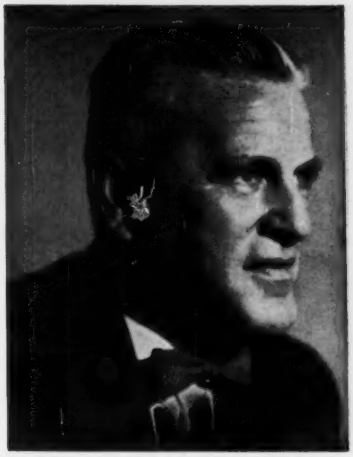
BREUER ELECTRIC MFG. CO.
5088 NO. RAVENSWOOD AVE.
CHICAGO 40, ILL.

☐ Would like to see the TORNADO 280 Floor Machine demonstrated.

☐ Send literature on the TORNADO 280

280-B

TORNADO®



ONE VIEW

Archibald B. Shaw

Children Are Being Cheated

IT'S NOT the gifted who are being cheated in our schools. It's a much bigger group: the low-income, culturally-deprived children who live downtown in our cities, and in rural shacks, and in factory and mill towns which progress and prosperity have by-passed.

Cheated is a strong word. It implies conscious neglect, even deliberate discrimination. But the record is increasingly clear and cannot be ignored. We are discriminating in our devotion of money, resources, and attention as between children on the basis of geography, family income, and class in the grossest sort of way.

Hollingshead documented it for us on a small scale in his description of Elmtown. We were shocked. Privately we deplored, equally we despaired of getting our schools very far ahead of our communities at large in reducing "class" barriers.

Now comes Professor Sexton's immensely detailed study of Big City [See *Executive Bookshelf,* page 51]. Any complacency we might have mustered is completely shattered by her incontrovertible evidence that we are doing the most for those who have the most, we are giving our gifts to the "gifted." Once again it may be too easy for most of us to shrug this off as a big-city problem—and for the big-city people to take a fatalistic view. To do so is to perpetuate the myth that what happens in America's big cities is lamentable but of limited concern.

Figures give the lie to any such myth. It's not only that one out of ten of America's children is in school in the big cities. It's the one-third to one-half of all American youth who never get to graduate from high school. It's the staggering proportion of those in the low-income group who have somehow stuck it out through high school who never go on to college. They *must* concern all of us.

What is our American Dream? Shall we match England, where only about 100,000 are enrolled in college and thereby eligible one day to join the Establishment? Or keep up with the Philippines where, with half England's population, there are 350,000 college undergraduates? Do we need the threat of Russia to move us? Or can we move vigorously, with sustained determination, to give our depressed one-third a better, a more truly equal, opportunity?

It won't be easy. In our growing mobility and expansion we have separated ourselves into even more rigid horizontal strata. We don't shop in the same places, what with the suburban shopping center and the one-class suburb. We're abandoning downtown and by-passing Elmtown. Even our public housing is designed to freeze people into economic clumps. At school board meetings, in our PTA's, in most of the sources of pressure on school policy, large groups of our population are just not heard.

What can we do? First of all, we can get the facts. We can inform ourselves and our boards, communities, and policy-setting forces, in and out of government. What are the facts on drop-outs, on school success, on class size, on teacher qualifications, on teaching resources and plant provisions, on pupil attendance and health, on the distribution of scholarships, on college aspirations, and on segregation-by-income as related to income level or socio-economic status? Do they show that we are giving all sections, all children, the same level of attention and service?

Then comes the tough question. Is the same provision for all truly the equal opportunity we cherish? Or does our belief in the worth and dignity of every individual, our conviction of the unalienable right of every child to a fair chance, lead to a responsibility to do more for those who need more? In a small but excitingly promising way, New York City has tried in its Higher Horizons project to concentrate resources where the need is greatest. It seems to work wonders, in the limited area. We need other and even more imaginative demonstrations of what can be done to make up for the deprivations and handicaps of so many children who come to schools which are basically oriented to middle-class values.

Many children are being cheated; at the very least by the proven inequality of the plant, resources, and teachers which they find when they go to school. To one view, equalization of resources alone won't do the job. But it's hard to justify any delay in this first step towards opportunity for all, regardless of income, class, color, or accident of geography. ●

FORUM

Why Not Free-Wheel?

I would like to propose the formation of a group within a school whose responsibility would be solely to deal with a search for knowledge itself. Its members would be given the space and time to meet together and carte blanche to allow their combined imaginations to roam freely over any given topic, regardless of whether it had anything to do with educational methods or materials—topics as diverse as the nature of Africa's social and economic revolution and what makes Mort Sahl's comedy so effective.

It is probable that out of the free-wheeling, wide-ranging discussions would come fresh insights which would disturb one's thinking out of its accustomed routine. Here would be a chance to speculate on what would happen *if* . . . if every principal were to spend a full month each year in the classroom while a teachers' committee administered the school . . . if ten typewriters, a movie projector, and a tape recorder were placed in every classroom, K–12 . . . if all colleges abandoned the Carnegie Unit requirements and all high school subjects were placed on an elective basis . . . if no grades were given for a year, no homework assigned, and attendance not required in the junior high grades . . . if all teachers in one school were exchanged with all teachers in another school 2,000 miles away . . . if the idea of merit pay were extended to school administrators, policemen, post office employees, and Congressmen . . . if people in every nation could come into contact with one another via a TV language-decoding machine.

Some speculations like these could be reduced to specific proposals, but it isn't necessary that this should happen. More important is the certainty that the insights gained through this kind of mental free-wheeling will find their way in meaningful form into the professional lives of the persons involved, thereby powerfully affecting the education of the students with whom they come in contact.—*Maxwell Jarvis, Director of Music Education, Passaic, N. J., Public Schools.*

Local Control That Counts

No other issue is so sacrosanct as the issue of local control. "Keep the schools close to the people" is the passionate plea of proponents as well as opponents of federal participation in school support.

What people? What is the locality? Is it New York City where one out of every thirty-five U. S. public school children is enrolled? Or the average South Dakota district with its enrollment of fifty? Or perhaps Alaska where the single district covers an area larger than Texas? This is a hollow issue, and one of little consequence, unless the principle is applied downward as well as upward.

For one thing we do know. Before great education can take place, the individual teacher and the individual school must have a full share of local control—freedom from bureaucratic restriction and freedom for imaginative and vigorous teaching. This is just as true in a small private school, in a large church school system, or in a complex university.

We'd better be sure we are at least as sensitive to the issues of local control within our systems as we are vigorous in our defense of the principle for our districts in the national and state debates. The local control that counts is in the classroom and in the school.

Need You be Old to be President?

It's not much of an organization in which all officers, all committee chairmen, all status-holders are in their sixties—or even fifties. Experience counts—but so does freshness and vigor.

At thirty we're secretly awed by the sages of sixty but just as impressed by our own accomplishments.

At forty we're a little impatient with the old fuddy-duds who run our organizations and who seem to know so much about what won't work.

At fifty we puzzle over the declining quality of the newcomers, respect the tenacity of our seniors, and tolerate our elder statesmen.

At sixty we cling to the wisdom of our peers, venerate our elders, covet the vigor of our juniors, pray for strength to stay the course, and take childish pleasure in organizational honors.

At every age we need to know and learn from our fellows, young and old.

That's why professional organizations must involve every age group, must mingle the vigors, insights, and wisdoms of old and young; and must build bonds of shared experiences to the greater strength of the organization itself and to the broader growth of all its members.

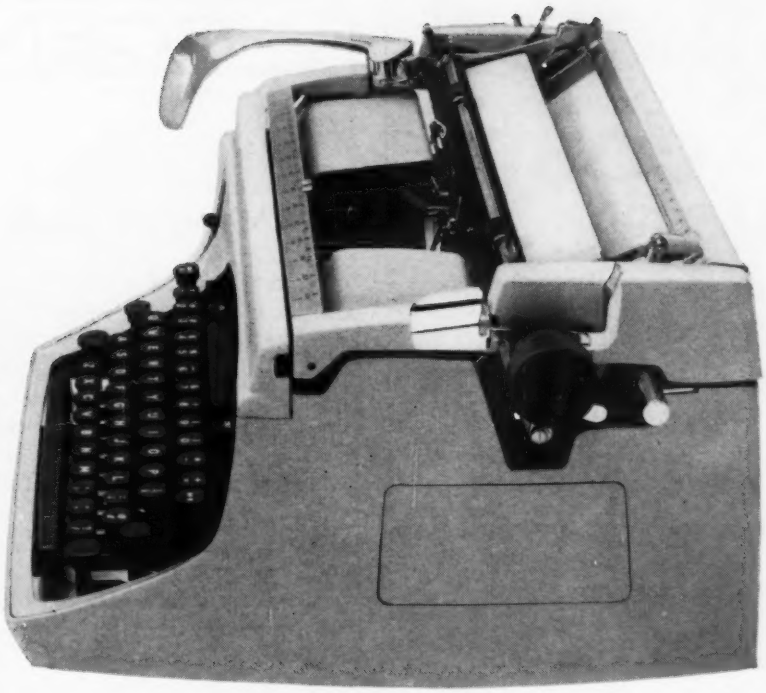
It's not only adolescents who build a world largely populated with their age group. Administrators who talk only to themselves and their peers lose just as much. Organizations in which only the elders are statesmen live more for the past than is healthy. In these we'd better ask ourselves: do you have to be old to be president?

Too Busy For Vacation?

It's not too late. How about that vacation? Are you really so important in the job that things will go to pieces if you're not there every minute? What will happen then if *you* are the one that goes to pieces?

Are you one of those who so freely prescribes rest and a change of scene for others, but finds it hard to take your own prescription? You know that a couple of weeks completely away from the job will increase, not lessen, the total contribution you make to your institution this year! Tear yourself away. Relax. Recharge your batteries. Vacation is not a privilege, it's a duty. It's the pause in the year's occupation that truly refreshes. ●

underwood



Here are five reasons why the new Underwood TOUCH-MASTER FIVE is ideal for classroom use:

1 Rugged construction (to withstand rough classroom use)
2 Exceptional lightness of touch (students make quick adjustment to electric machines when entering business offices)
3 Exceptionally light, fast carriage return
4 Instantly responsive touch tabulation
5 Paper centering, title-heading centering and aligning scales and balanced margin indicators

To get all the facts about the new Underwood "Five," fill out and mail this coupon.

TOUCH-MASTER FIVE

Underwood Corporation, Business Education Department,
One Park Avenue, New York 16, N.Y.

Please send me literature on the new Underwood standard and electric typewriters, and my free copy of the newly revised "History of the Typewriter," without obligation.

Name . . . . . Position . . . . . .

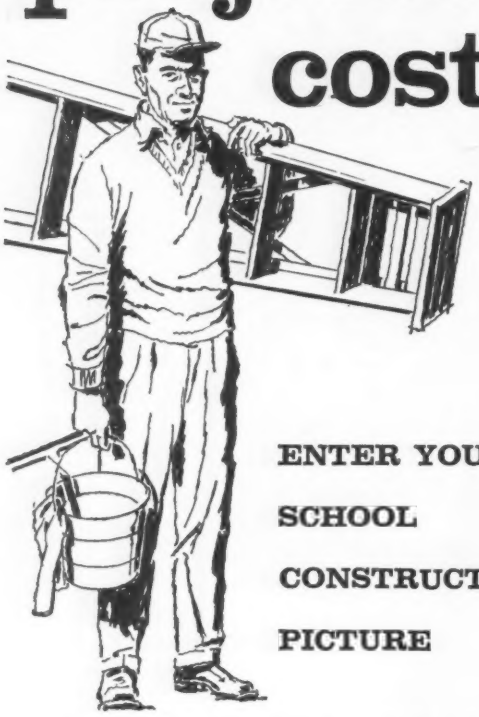
School . . . . . .

Address . . . . . .

Circle OV-209 on reply card, last page

How

projected costs



ENTER YOUR SCHOOL CONSTRUCTION PICTURE

According to a recent study made by a team of professional architectural engineers, projected cost factors such as heating and maintenance can raise the ultimate cost to taxpayers of a hypothetical classroom as much as FIVE times—depending on whether the walls are made of brick, metal or glass. Here is a summary of their findings:

Wall Type	Initial Cost Per Sq. Ft.	Ultimate* Taxpayer Cost Per Sq. Ft.
Brick	**$2.30**	**$4.13**
Metal	**$6.00**	**$9.20**
Glass	**$4.60**	**$20.48**

** Based on 50-year life*

The details of this study—plus other important facts about school construction—are given in an interesting new booklet, "A FEW HARD FACTS ABOUT THE DESIGN, COST, CONSTRUCTION OF THE MODERN SCHOOL BUILDING."

Price 60c. Write for copies to:

Structural Clay Products Institute,
1520 18th St., N.W., Washington 6, D.C.

ECONOMIC SCENE

More Money for Bonds

DURING THE first quarter of 1961, savings by individuals hit its highest level since the fall of 1958, according to a report by the Securities and Exchange Commission. New savings totaled $5 billion, compared to $3.2 billion during the first quarter of 1960. The SEC figures also include savings of unincorporated businesses, trust funds, and non-profit organizations.

Tax-free school bonds, which had an average interest rate of 3.54 percent during June, loom as attractive investments for holders of the new savings dollars. The June interest average—highest in almost a year—reflects a heavy demand for school construction funds. General construction is expected to establish a record high in 1961, perhaps several billion dollars above its previous peak. School construction is also expected to set new records this year.

In addition, current impression among businessmen and economists is that the low point of the recession has been passed. They feel that business will quickly begin to expand at a rapid pace. There is widespread opinion among them that Gross National Product will run as high as $530 billion by the end of 1961; and some estimates place it at $560–70 billion by the end of 1962.

A GNP of $530 billion would probably cause some cuts in savings. This would tend to reduce the amount of money available for loans and, since business is expected to increase its demands for loans by the end of the year, interest rates would tend to rise. Borrowing by the Federal Government to finance deficit spending would also tend to push up interest rates. All of these factors together make it very unlikely that school or other bond interest rates will decline during the next year. Aggressive action by the Federal Reserve Board would be necessary to hold down or reduce interest rates.

Aware of these factors, the Treasury Department and the Kennedy Administration have recently been bringing pressure to bear on the Federal Reserve Board to lower interest rates. The Board has expressed concern about the rising rates, but is afraid that if they are artificially lowered, saving would be discouraged and stock market speculation indirectly encouraged.

According to the SEC, the sharp rise in savings largely reflects the recent drop in durable goods (automobiles, washing machines, etc.) spending. The rise in savings was accompanied, says the SEC, by a $1.7 billion decline in consumer debt, against only $500 million during the same period last year. "Part of the debt reduction is a

Representative Bond Issues

(Sold from June 1 to June 30, 1961)

School District or College		*Amt. in Millions*	*Moody Rating*	*Net % Interest*
Ariz:	Maricopa Glendale Un HS #205	$ 2.9	A	3.39118
Cal:	Tamalpais Un HS	3.	A	3.54
	Coachella Val Jr Col	3.5	*Baa	3.8308
	So San Fran Unif	1.325	A	3.513
Colo:	State U (dorm rev)	1.867	NR	3.50
Del:	U of Del (dorm & dining rm rev)	1.19	NR	3.125
Ill:	Cook Co Tp HS #214	1.95	A	3.7294
Kan:	Murray State Col (bldg rev)	1.4	NR	4.0996
Me:	Gardiner W Gardiner Admin #11	1.68	*A	3.70
Mich:	Warren Woods Public	1.56	Baa	3.956
Minn:	St. Louis Pk Ind #283	1.	Baa	3.7231
Mo:	U of Mo (hous rev)	2.05	NR	3.50
N. J.:	E Brunswick Tp	1.916	Ba	4.13
	Howell Tp	1.342	*Ba	4.13
N. Y.:	Newburgh	2.232	A	3.40
	Huntington Cent #6	1.275	Baa	3.62
	Greenburgh Un Fr #6	1.44	A	3.47
Ohio:	Kettering	2.4	Baa	3.82
	Kent State U (dorm rev)	3.5	NR	3.9734
Penn:	Altoona	1.	A	3.5056
S. C.:	Richland Co #1	1.5	A	3.4006
Tex:	Dallas Ind	10.	A	3.29238

**—provisional NR—none assigned*

Compiled from The Daily Bond Buyer

seasonal drop in charge account credit," an SEC spokesman said. "But it chiefly reflects the huge drop in installment loans for purchases of automobiles and other durable goods."

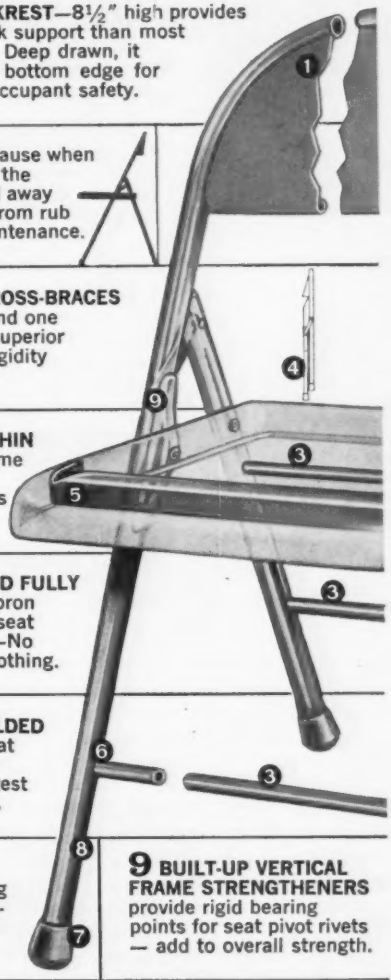
Some sharp changes were recorded in overall individual savings between the first quarter of 1960 and the first quarter of 1961. Deposits in commercial and mutual savings banks rose very sharply—$2 billion. An additional $1.9 billion in savings was created by heavy sales of savings and loan association shares. Securities holdings, including bonds and preferred and common stocks, dropped $1.1 billion, but purchases of investment company issues (mutual funds, etc.) totaled nearly $600 million, a record high. Private insurance and pension reserves rose $2.4 billion, representing the largest segment of saving for the period. Government insurance and pension reserves increased by $100 million, $200 million less than the first 1960 quarter. The SEC attributed the decrease to stepped up unemployment benefit payments and higher veterans' life insurance dividends.

Over-all, financial assets held by individuals total more than $960 billion—about $200 billion more than in 1957, the first year for which such figures are available. The bulk of these new assets are in preferred and common stock. As of Dec. 31, 1960, liabilities of individuals totaled $188 billion. About 70 percent are represented by mortgages and about 25 percent by installment debts. •

Circle OV-210 on reply card, last page

When you purchase Folding Chairs . . .

Insist on these 10 Important Structural Features



1 EXTRA DEEP BACKREST—8½" high provides more form-fitting back support than most competitive chairs — Deep drawn, it features fully curled bottom edge for added strength and occupant safety.

2 SAVES WALLS because when feet are against wall, the backrest remains well away and safeguards wall from rub marks and costly maintenance.

3 THREE FRAME CROSS-BRACES — two on rear legs and one on front legs insure superior frame stability and rigidity for longer chair life.

4 SEAT FOLDS WITHIN FRAME to double frame thickness for flat stacking—more chairs to storage area.

5 SEAT BRIDGE AND FULLY CURLED EDGE on apron of seat add over-all seat strength and safety—No sharp edges to tear clothing.

6 RESISTANCE WELDED FRAME similar to that used on automobile frames insures greatest strength and rigidity.

7 SUPER DYLAN FEET — long wearing molded feet are non-marring and provide firm floor contact.

8 ELECTROSTATICALLY APPLIED FINISHES in Standard enamel or Metallic colors . . . free from runs and soft spots.

9 BUILT-UP VERTICAL FRAME STRENGTHENERS provide rigid bearing points for seat pivot rivets — add to overall strength.

10 TEN YEAR GUARANTEE against structural failures is your assurance of the best investment in folding seating, by far!

BE SURE you get what you think you're getting!

To the casual observer, most folding chairs look alike. But what a difference there is upon closer examination! Study the Krueger 901-E features above and you will readily see why they last longer under hardest usage.

These Important KRUEGER Features Cost No More than Competitively Priced Chairs of Inferior Quality.

WRITE for complete line catalog.

KRUEGER

METAL PRODUCTS • GREEN BAY • WISCONSIN

8 ways to enrich school curricula and improve administration

...through an economical sound-communication system

The console shown here is the central control of an Executone sound-communication system for an average-sized K-8 or secondary school. Located in the General Office, it handles switching, programming, transmission and power amplification for all the services described below—and others that your special requirements may suggest. Its 5-channel capacity eliminates the need for more than a single conduit for signals or communication between any two points in the system. Identical functions are available in a vertical console, for use where office space is at a premium.

Supplement the teaching program with sound

Classroom audio-aids can give students access to sources of important teaching materials . . . can place each class in closer relation to the school and the world around it . . . can help develop each pupil's critical faculties. Leading educators value the availability of:

Radio broadcasts: speeches; music; coverage of special events; interviews; important dramatic presentations; sessions of Congress; etc.

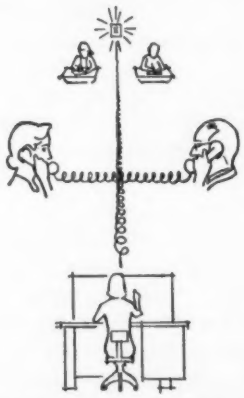
Recordings: from an ever-increasing fund of educational material on tape and discs.

Transmissions from other parts of the school: student musical programs; sports events; etc.

Recording and play-back facilities: for classes in choral and instrumental music; language and speech courses; drama workshops; etc.

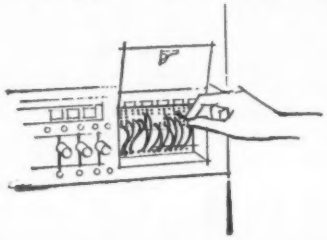
All these audio-aids can be supplied by a single Executone classroom reproducer . . . the same instrument that handles time signal, alarm and intercom functions. With a standard Executone system, any combination of rooms—chosen by selector-switches—can receive either of two simultaneous sound transmissions. Reproduction is of unusually high quality. Where recording and play-back are desired, rooms need only be supplied with microphone and tape-deck jacks. Amplification takes place at the main control console.

Speed administrative action: relieve over-burdened staff



Freedom to teach—and to work more productively—is one of the best answers to the chronic shortage of teachers and administrative personnel. Time savings increase in direct proportion to the staff's communication capabilities. Today, these can economically include: A) 2-way electronic voice intercom . . . between the office and any classroom . . . with complete privacy safeguards. B) Private-line room-to-office and room-to-room intercom . . . with call origination from any point. The Executone system offers all the above, providing 2-way remote-reply intercom through each classroom speaker . . . optional private-line handset communication using an independent channel carried by the same wiring.

Save money & space in providing variable time programs



Classes with varying time requirements need no longer be subject to an inflexible set of signals. But conventional time-programming equipment—including independent crossconnect panels, relay racks, classroom buzzers and wiring systems—is bulky and expensive.

The Executone system includes a remarkably compact, easily accessible peg-board programmer—which allows each classroom to be placed on any one of six different time programs within seconds. This function is built directly into either standard console! The costly conventional system is eliminated.

Circle **OV-211** on reply card, last page

Preserve student discipline during unsupervised intervals

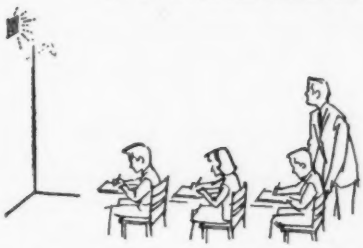
When teachers must leave their classes, the maintenance of discipline usually depends on the presence of a substitute. Faculty members may now be relieved of this non-productive extra duty. Unattended students can be monitored from the Office—through the Executone speaker—and notified by its open-line signal light that they are under remote supervision.

Control student transportation

Teachers find it especially difficult to keep order—and prevent delays—when restless students must await loadings of homeward-bound school buses. This condition is relieved when children are permitted to play freely—until summoned to the loading area in proper groups and directed to their buses.

This can be achieved through an inexpensive adjunct to the Executone system: a microphone jack at the loading area and speakers at loading and congregation areas. Both microphone and speaker wiring run in the same conduit. The amplifiers at the main console are utilized. Any available microphone can be plugged in at dismissal time.

Preserve the continuity of classroom activities



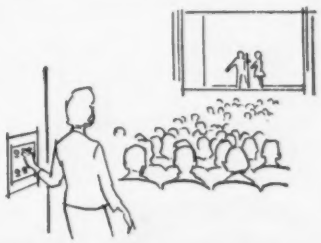
Communications in the modern school go a long way toward assuring uninterrupted class activities. But care must be taken that the facilities which make this possible are not themselves a disruptive influence. This is the case where calls make it necessary for teachers to drop what they are doing, to approach or handle equipment . . . or where a call interrupts a sound transmission.

Executone removes both of these contingencies. Through-the-speaker calls, for brief conversations, can be answered by the teacher from any point in the room—without raising her voice. And use of the optional handset channel for longer conversation prevents interference with concurrent sound programs.

Prevent confusion and panic in emergencies

Leading administrators have long felt the need for greater control of student bodies in emergencies. They seek alarm signal facilities to augment standard fire alarm systems—for such special contingencies as air raids. To control student movements in critical situations, they wish to make it possible for any staff member to broadcast voice instructions—without having been trained in the use of sound equipment.

In the Executone system, the same components used to produce time signals will also provide supplemental alarms. Executone furnishes duplicate signal generators—for fail-safe standby duty. For follow-up voice instructions, after an alarm, a staff member need only touch the 'emergency' bar at the Executone console. This overrides all other transmissions . . . allows him to speak immediately to the entire student body.



Provide quality-controlled sound for audience activities

No audience facilities are so intensively used as those in the modern school. Auditoriums and gyms serve not only during the school day—but also for adult and community activities . . . for socials and special events. Sound reinforcement equipment must be designed to high standards. And controls must be efficient. Conventional microphone mixing units—because of A-C power, ventilation and space needs can seldom be situated where they do most good.

An Executone system provides not only sound reproduction of highest quality, but also new flexibility in the location of controls. Transistorized preamplifiers and mixers are compact enough for concealment anywhere . . . have no special installation requirements.

Executone manufactures School-to-Home telephone equipment for shut-ins.

Your Local Executone Organization Offers You Six Stages Of Service

1. THOROUGH, PROFESSIONAL CONSULTATION OR SURVEY
2. DESIGN STANDARDS FOR OPTIMUM SYSTEM PERFORMANCE
3. FULL INSTALLATION RESPONSIBILITY
4. THOROUGH TRAINING OF YOUR PERSONNEL
5. FULL YEAR COMPREHENSIVE FACTORY GUARANTEE
6. ON-PREMISES MAINTENANCE BY SKILLED TECHNICIANS

Executone
COMMUNICATION and SOUND SYSTEMS

THIS COUPON WILL BRING YOU IDEAS . . . INFORMATION . . . ASSISTANCE — WITHOUT OBLIGATION

Executone, Inc., Dept. E-3
415 Lexington Avenue, New York 17, N. Y.

☐ I would like my local Executone Systems Engineer to call.
☐ I would like detailed literature on sound and communication systems for schools.

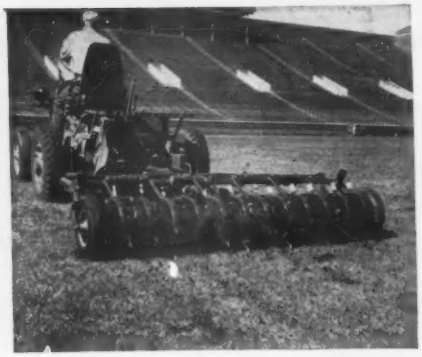
Name_____
School_____
Address_____
City_____ Zone____ State_____

In Canada: 331 Bartlett Avenue, Toronto

Circle OV-212 on reply card, last page

Want Green, Heavy Turf?

USE A RYAN RENOVAIRE



You'll grow strong, deep-rooted grass when you aerate and renovate large turf areas with the RENOVAIRE.

Ideal for restoring turf on athletic fields, golf courses, parks, playgrounds, civic centers and even farm pastures. This heavy duty machine is made with a husky, welded tubular steel frame and rides on automotive type wheels with full pneumatic tires.

Your choice of 2 models—Monarch—8 feet wide with 12 aerating wheels, or the smaller-Chief—4½ feet wide with 6 wheels. Both models feature 22" diameter aerating wheels weighing 168 lbs. each. Wheels are individually suspended to assure maximum penetration at adjustable depths up to 4 inches. 3 styles of tines available—Coring, Slicing, Renovating.

Your RENOVAIRE can be tractor-pulled at speeds up to 10 miles per hour. Will cover 15 to 30 acres per day. Moving from job to job is easy, too—hydraulic lift raises wheels full 7 inches off ground.

NEW 1961 MODELS—Write for full details and name of your Ryan dealer.

Ryan **LANDSCAPING EQUIPMENT CO.**
871 EDGERTON ST. • ST. PAUL 1, MINNESOTA

Circle OV-213 on reply card, last page

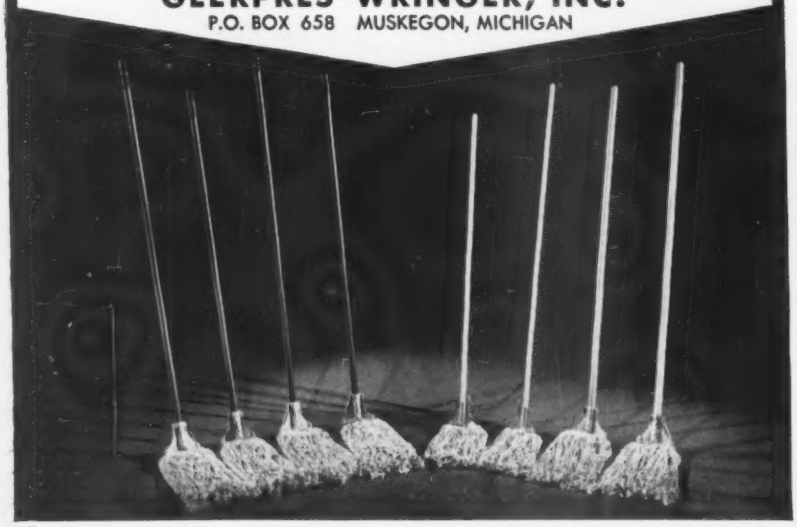
GEERPRES MOPSTICKS

• TIMESAVERS • WORKSAVERS
• FLOORSAVERS

Exclusive Geerpres design eliminates wing nuts, chains, clamps, etc., that can tangle mop strings or injure floors and furniture. Foolproof spring yoke feature holds mop securely yet lets you change mop heads quickly and effortlessly.

Geerpres mopsticks are available with wood, metal or vinyl-covered metal handles in three different lengths.

GEERPRES WRINGER, INC.
P.O. BOX 658 MUSKEGON, MICHIGAN



CALENDAR

AUGUST

6–9, College and University Personnel Assn. At Seattle, Wash. Ex. sec.: Donald E. Dickason, 809 S. Wright St., Champaign, Ill.

20–26, National Conference of Professors of Educational Administration. At Berkeley, Calif. Sec.-treas.: Dale K. Hayes, Teachers College, University of Nebraska, Lincoln 8, Neb.

31–Sept. 6, American Psychological Assn. At New York City. Ex. sec.: John G. Darely, 1333 16th St., N.W., Washington 6, D. C.

SEPTEMBER

29–Oct. 4, Department of Rural Education. At Pittsburgh, Pa. Ex. sec.: Howard A. Dawson, 1201 16th St., N.W., Washington 6, D.C.

OCTOBER

1–6, National Recreation Congress. At Detroit, Mich. Ex. sec.: Willard B. Stone, 8 West Eighth St., New York 11, N. Y.

2–6, National Council on Schoolhouse Construction. At Atlanta, Ga. Ex. sec.: Floyd G. Parker, College of Education, Michigan State University, East Lansing

5–6, American Council on Education. At Washington, D. C. Secretary: Edmund J. Gleazer, Jr., 1785 Massachusetts Ave., N.W., Washington 6, D. C.

7–12, Assn. of School Business Officials. At Toronto, Ontario, Canada. Ex. sec.: Charles W. Foster, 1010 Church St., Evanston, Ill.

Data for Delegates—Toronto's top attractions include the Art Gallery in Grange Park; Royal Ontario Museum's collection of Chinese art; Casa Loma, the castle transplanted stone by stone from Scotland; beautiful rock garden in High Park; Edwards Gardens; Allen Botanical Gardens; Old Fort York; University of Toronto; Toronto Stock Exchange; City Hall; Parliament Buildings; The Old Mill. If time permits: golfing, fishing, and an all-day tour of Niagara Falls.

16–20, National Safety Council. At Chicago. Ex. sec.: R. L. Forney, 425 N. Michigan Ave., Chicago, Ill.

20–21, Council on Cooperation in Teacher Education of the American Council on Education. At Washington, D. C. Sec.-treas.: Howard R. Boozer, 1785 Massachusetts Ave., N.W., Washington 6, D. C.

26–27, Educational Records Bureau. At New York City. Ex. sec.: Grace Turner, 21 Audubon Ave., New York 32, N. Y.

LATE NEWS

For further coverage, see pages 57–62.

TRIPLE HANGING: The House Rules Committee has, for all intents and purposes, killed all federal aid to education legislation during this session of Congress. By a vote of 8 to 7, the committee voted to table all three Administration bills, and once again became the graveyard for aid to education legislation. While technically it is still possible to force the bills out of the Rules Committee, proponents are not optimistic.

Background: Early in this session of Congress the Rules Committee was enlarged with members favorable to the Administration. To the surprise of Congressional observers (and the delight of Chairman Howard Smith) this produced one of the strangest alliances against a federal aid bill ever put together on Capitol Hill.

By a vote of 9 to 6, the Rules Committee decided not to clear the federal aid bill, or a companion $300 million bill on higher education, until it had in hand a third bill to aid private and parochial schools. The majority included five Republicans, two Southern Democrats and two Northern Democrats—James J. Delaney (N. Y.) and Thomas P. O'Neil (Mass.)—normally pro-Administration. Both men represent heavily Catholic districts.

At first Delaney and O'Neil said they would be satisfied if the Education and Labor Committee reported out a separate bill containing authority for federal loans to help finance construction of private school buildings. The second bill, authorizing $375 million in private school loans as part of an extended National Defense Education Act, was duly reported and went before the Rules Committee.

But strong doubts had arisen over whether a Committee majority would clear it for consideration by the House. In addition, Delaney had announced that all three education bills should be killed! A new "non-discriminatory" bill, he declared, should be substituted. He said this measure should provide grants to help educate children in parochial and other private schools as well as those in public schools.

On July 18, when the Rules Committee considered the school legislation, Delaney's vote was crucial. He joined five Republicans and two conservative Democrats to hang the three-bill package.

Signs that the Administration has decided to get "tough" and apply political pressure came from HEW Secretary Ribicoff. At a press conference, he said that his department would "recommend" that the President veto any so-called federally-impacted area legislation Congress passes unless they also pass a general federal aid to education bill.

The President underscored this view at *his* July 19 press conference. Mr. Kennedy said, "My judgment is that the impacted school bill should be part of general public assistance. And that's the position of the Administration. And therefore, I'm hopeful that the members of Congress who are anxious to secure the passage of this legislation should also recognize that we are not meeting our responsibilities if we merely pass the impacted area (bill). We should pass them both together. . . .

"My view is that the best way to secure the passage of that bill (impacted areas) is to treat it as a unit, which I believe it is."

* * *

BLUEPRINT: A gray-covered 60-page pamphlet with the innocuous title "A Federal Education Agency for the Future" (see *Report from Washington*, page 28) is rapidly becoming one of the most controversial items on the Government Printing Office's publication list.

Rep. W. H. Ayers (R-O) said on NBC-TV's *Today*, "I feel confident that at the end of ten years if this plan were to go into effect we would have the centralization of education in Washington, D. C. and the local school boards and the local community would no longer have control over it."

The report does not actually advocate a greater federal involvement in education, but it is largely based on the assumption that the federal role will expand.

More than a little astonished by all the controversy over the pamphlet is its principal author, Assistant U. S. Commissioner of Education Homer D. Babbidge. Speaking at the NEA convention, he said, "I have learned in recent weeks that it can be read, so to speak, in an ominous tone of voice."

* * *

TROUBLE IN NEW YORK: The New York City school system is gigantic. It enrolls almost one million children, employs 60,000 persons and has about 900 buildings. As Superintendent John Theobald says, "One would be unrealistic if one thought that in a system this large there was not always something wrong, something to be improved or corrected."

For more than a month now, the State Investigation Commission, the Queens County (N. Y.) district attorney, and the city commissioner of investigation have been taking a hard look at the system—particularly its Division of Housing, which is in charge of school construction and maintenance.

By the time the State Investigation Commission's

inquiry ended after six days of headline-making public hearings, this, briefly, is what the commission found:

- Execution of plans by various contractors was "hasty, slipshod, and careless," ranging "from callous indifference to virtual fraud."
- Supervision of construction by board of education personnel "suffered to a shocking extent due to inefficiency, inadequately trained staff, ineffective liaison, lack of effective leadership, and a sorry atmosphere of corruption and hand-outs."
- "Almost complete lack of sincere, determined follow-up by board officials permitted glaring construction defects to go uncorrected for years in spite of timely and repeated urgent appeals from school principals, teachers, and custodians."
- Improprieties in the selection and supervision of architects have resulted in some instances in faulty plans and design.
- The combined effect of these shortcomings and abuses has resulted in "serious hazards to the physical safety, health and well-being of pupils and teachers alike" and "incalculable waste of taxpayers' funds."

* * *

SAVERS: Teachers and other school employees are now operating 1,262 credit unions in the United States, says the Credit Union National Association. CUNA's 1961 Yearbook also shows that this is more than 6 percent of the 20,293 credit unions in the United States at the end of 1960.

The majority of the teacher credit unions—over 1,000—serve teachers and employees in primary and secondary schools, and there are close to 200 credit unions serving university and college faculties. It is estimated that more than a half-million teachers are being served by credit unions.

* * *

CATCHING ON: Educators like to use televised instructional materials, according to a U. S. Office of Education report. Data was collected from elementary, secondary, and university educators and from a sampling of public school systems representing 97 percent of the public school enrollment. There is "a definite receptiveness toward the use of television for instructional purposes and a very favorable attitude toward the use of recorded televised instruction," the Office of Education was told.

Dr. Wesley Meierhenry and Jack McBride, both of the University of Nebraska, wrote the report. They estimate that 500,000 school children and 100,000 college students were taught directly by television in regular courses in 569 public school systems and 117 colleges and universities in 1959.

The authors recommend distribution and exchange of films, tapes, and other instructional materials at a national center and a number of regional centers. This would, to a large extent, eliminate needless and expensive duplication by individual schools and universities.

* * *

HOME-WORK: Home economics teachers are not keeping up with the times, according to Dr. Patricia A. Tripple of the University of Nevada. She told the annual meeting of the American Home Economics Association that "you have not altered the teaching of homemaking to help your students to prepare for the life you are living. Instead you have them looking through rose-colored glasses at the home life led by our grandmothers."

"Let's stop talking as if the girls have a choice of marriage or a career. The chances are that they will have both," she said. "The pattern is inescapable. The young woman of today needs, wants, and plans to have a husband, a home, a family, and some kind of job. Educators must . . . help her learn both the attitudes and the skills that will give her the best possible experience in all of these."

* * *

SEPTEMBER DEADLINES: When schools open next month, the cities everybody will be watching are Little Rock, Dallas, New Orleans, and, most of all, Atlanta. For these are the major areas for school desegregation.

Atlanta's peppery Mayor William B. Hartsfield is optimistic that his city's first step toward school integration will come off peaceably.

"Atlanta is different from other southern cities," says Hartsfield. "We're part of the nation, not some fanatic and crazy fragment of the Old South. So many other places are still fighting the Civil War; in Atlanta we're not. That makes the difference."

Ten students—from about 175 Negro applicants—have been accepted by Atlanta's school board for admission to formerly white high schools.

"We'll get away with less violence than anywhere else," predict's Hartsfield. "There will be an effort to cause a clash, but most of that will come from outside Atlanta, from the rural boys, the professional segregationists.

"I call them the outdoor toilet set. It makes them mad, but that's what I call them."

In *Dallas*, officials have warned extremists that the city "will not tolerate any sort of action that scars the lives and warps the memories of our six-year-old children of whatever race."

Classroom mixing of the races for the first time will begin in the first grade and be extended a grade a year on a stairstep plan.

Another southern city to watch closely is *New Orleans*, which has begun processing 66 Negro pupils for first-grade assignments to previously all-white schools.

The last major "hot spot" is *Little Rock*, which made limited high school integration work after mob violence and a year of closed schools. In response to

a federal court order, the board plans to desegregate four of its five junior high schools, double the number of Negroes attending the once-white high schools and integrate Technical High School, the city's last all-white secondary school.

Major expansion of desegration will also take place in *Miami; Raleigh*, N. C.; *Charlottesville*, Va.; and *Montgomery, Harford*, and *Carroll Counties* in Maryland. Delaware has been given court approval of a plan to open all grades in all public schools to Negroes.

Initial desegregation on the college level took place during present summer sessions at the *University of Miami, Wake Forest College, St. Petersburg Junior College*, and the Martin branch of the *University of Tennessee.*

Action of another type is contemplated by the National Association for the Advancement of Colored People. At their annual convention, they called for massive registration of Negro children in southern schools next month.

Thurgood Marshall, director and counsel of the organization's Legal Defense and Education Fund, Inc., explained, "All we want is for the attempt to register to be made. We will then carry on the fight in the courts."

* * *

JOURNALESE: The journalism department of Southern Illinois University has been awarded a grant from the *Wall Street Journal*'s Newspaper Fund to underwrite a program aimed at improving school pages in newspapers.

Don Carter, the Fund's executive director, said the project also seeks to stimulate more interest in newspaper careers by having students work with hometown editors.

* * *

SOUTH OF THE BORDER: The great task of Latin American countries is the development of their educational facilities and opportunities at all levels, according to David B. Williams, director of Cornell University's Foreign Student Office. He has completed a tour of educational facilities in 10 Latin American countries.

At present, Williams said, many educational efforts are spotty and uncoordinated. He cited the need for a long-range plan to tie in well-developed existing programs and bring them under a single intergovernmental supervisory board.

"The countries of the Americas must continue planning together to turn out the teachers and technicians needed for developing realistic school programs for all levels of society."

Meanwhile, U. S. Commissioner of Education Sterling M. McMurrin announced a special Latin American Studies Program including language and area centers for graduate school instruction in Spanish, Portuguese, and related studies; graduate and postdoctoral fellowships for students taking advanced training in a Latin American language; and special institutes for elementary and secondary school teachers of Spanish and Portuguese, to be conducted by U. S. institutions in Latin American countries.

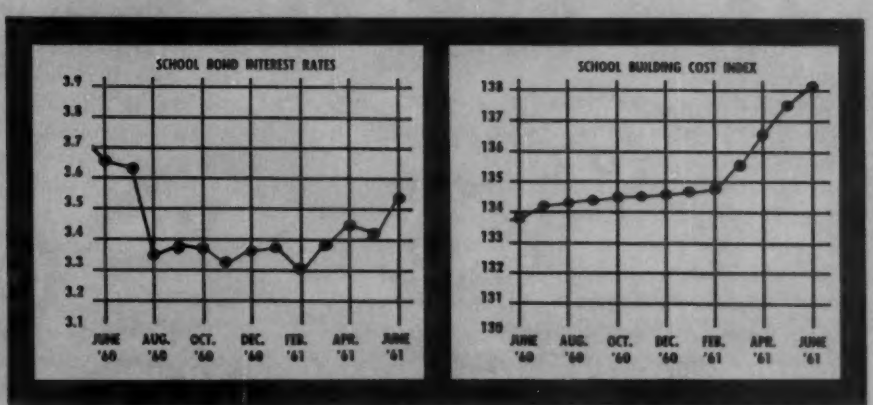
In addition, the Latin American Studies Program will conduct a series of studies and research projects. These include the creation of Portuguese language-teaching materials for secondary schools.

* * *

NOT ONE IN ONE HUNDRED: Most English teachers are not helping their slow students, maintains Donald Miller of William Woods College, Mo. He told the 11th annual conference series for English teachers at the University of Michigan that "Most of our high school English teachers teach so many students every day and teach such a full and varied daily schedule that not more than one in one-hundred has the energy or time to devote significant attention to one slow learner per day.

"Most English teachers, as they are now trained by the school of education and the department of English of our colleges and universities, could not long maintain satisfactory mental health if they were assigned separate, carefully defined classes of slow learners. Yet, they will face perhaps 10 to 25 slow learners scattered through their five or six classes each year," Miller said.

"Practically no teacher in training or in service will freely choose to study this year or the next the means of teaching English to slow learners," he said.



BUILDINGS & BONDS: Contrary to predictions, school bond interest rates rose sharply in June to 3.54%. School building cost index rose to 138.1 (1947–49 = 100).

FIVE BILLION MORE: The U. S. needs to double the number of scientists and engineers getting doctorate level training in the next nine years, maintains the National Science Foundation. To achieve this goal, says NSF, spending at colleges and universities for scientific education and basic research would have to nearly triple—from about $3 billion in 1961 to $8.2 billion by 1970.

About 6,900 students now are earning doctorate degrees in science and engineering each year. This should grow to at least 13,000 by 1970, according to the report entitled "Investment in Scientific Progress."

The study shows a deficit of about $300 million in science equipment in colleges and universities and an additional deficit of $500 million in laboratory buildings.

The problem is not just new scientists and engineers with doctor's degrees. Dr. J. C. Warner, president of the Carnegie Institute of Technology, said recently that "There is ample evidence . . . that engineers who do not continue their education, whether they be in industry or the colleges, become obsolete. . . . Unless a graduate of 10 years ago has systematically spent about 10 percent of his time extending his knowledge beyond the level of development achieved in his collegiate training, he will not have value in excess of that of a new graduate."

* * *

BLACKOUT: Will students concentrate better if classrooms have no windows? In Montgomery County, Md. this summer, school officials have covered windows with wall panels in four classrooms to find out how students and teachers react. (The County school board expects to build two almost-windowless schools in the future.)

Gerald McGee, a history teacher, said the first few days in the special classrooms were eerie. "There was a terrific clap of thunder one day. The pupils all turned to the windows, looked, and saw nothing but a gray wall."

* * *

COST OF LEARNING: Average salaries for full-time faculty members in all four-year undergraduate colleges rose to $7,330 in 1960–61 academic year, up about 6.5 percent from the $6,880 average of the previous year, the U. S. Office of Education announced.

However, it apparently pays to work for the government. Average salaries in four-year public institutions of higher learning is now $7,570, up 7.1 percent. In private institutions, it is $6,960, an increase of 5.5 percent.

In another report, the American Association of University Professors announced that a full professor at Harvard, MIT, and Princeton now averages $17,800. At next-ranking Brooklyn College, Barnard, and Yale he makes do with an average of $15,300. The largest number of professional incomes are at the level of $9,000–$11,000, and for assistant professors the average runs from $8,300 at the top to $6,000.

Average salary in junior colleges rose to $6,620, up 8.3 percent from the previous academic year. This breaks down to an average of $7,000 in public institutions and $4,910 in private institutions.

The study also shows a decided increase in student costs. Resident students in private institutions paid an average of $859 (tuition and fees) in this academic year, an increase of more than 9.9 percent over the comparable 1959–60 average of $782. In public institutions, the figure is $206 compared with $193, a 6.5 percent increase.

* * *

MANAGEMENT: New York University's School of Education will offer a graduate program in college union management this fall. The program, leading to a degree of master of arts, is the first of its kind offered by an American college or university, according to Dr. Claude W. Grant, director.

* * *

POTPOURRI: A House Education subcommittee has approved President Kennedy's three-year $275 million "youth opportunities program," including a revival of the Civilian Conservation Corps of the 1930's. . . . John Schwarzwalder, general manager of KTCA-TV, Minneapolis-St. Paul, predicts that a six-state midwest ETV network will be in operation before the end of 1963. . . . Booklets sold with phonograph records—to supplement the teaching of a language, for instance—come under the federal manufacturers' excise tax on records, the Internal Revenue Service said. This treatment applies, however, only where texts have no function other than to augment the discs. . . . The Chase Manhattan Bank moved into a new headquarters building in New York and donated nearly 100,000 pieces of old office furniture (value: about $350,000) to Columbia University. . . . Ford Motor Company is doubling its rebate to dealers for new cars loaned to schools for use in driver-training programs. . . . Two top students at Groveton High School, Fairfax, Va., rejected the annual Daughters of the American Revolution citizenship award because, as one put it, "I don't agree with anything—or at least hardly anything—that they [the DAR] stand for. . . . Young teachers will speak up in West Virginia this September when the state education association holds its conference for teachers who have been in the profession not more than six years. . . . A Negro teacher whose father is a White House doorman has been named principal of the all-white Reedsboro Central Grammar School, the first of his race to hold such a post in Vermont. . . . The Texas Legislature has requested the Texas Education Association make a study of paperback textbooks in public schools. . . . Boston University has inaugurated a unified six-year program of medical education for very high ranking high school graduates.

CLOSE-UPS

Hugh Hussey

THIS SUMMER, twenty high school juniors in and around Washington, D. C., are taking part in high-powered medical research projects. They were chosen from 400 applicants for summer research fellowships at the Georgetown University School of Medicine. During their two-month training, the students are attached to one of the research programs at the school and do not just work in a laboratory or assist in general hospital work.

This is the first program of its kind, and Dr. Hugh H. Hussey, dean of the medical school, hopes that it will catch on in other cities. Dean Hussey and his faculty started the program experimentally three years ago and this summer marks its second full year.

"Of course, the students chosen are of very high caliber. But even so, it is remarkable to see how completely they are able to participate," he said.

As vice chairman of the board of trustees of the American Medical Association, Hussey is keenly aware of the national medical education problem. The other more glamorous sciences, he explained, seem to be attracting a greater proportion of top high school graduates. And, despite the tremendous increase in the number of college graduates, the number of applicants to medical schools has remained about the same. In 1947, nearly 7 percent of all college graduates applied to medical school, compared to 4 percent in 1958.

Hussey is not convinced that the high costs and long duration of medical education are at the root of the drop-off in interest. "There was no more difficult time to go to medical school than during the 1930's when I attended Georgetown. I never would have finished medical school if it had not been for the generosity of several university officials. By one means or another they dug up the funds to keep me going through the course. The situation is a lot better today, and I believe that if the student has the motivation, the financial means will be forthcoming."

Van Durand

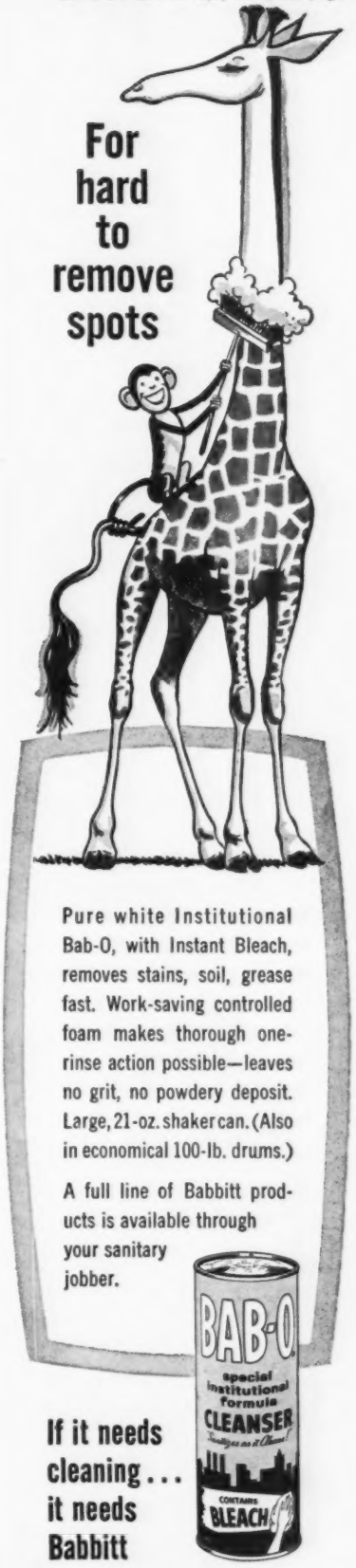
Practitioner of medical education.

Following his graduation in 1934, Dr. Hussey went into private practice. He expected to be a family doctor all his life, but in 1942 he switched to internal medicine and also made a teaching connection. For sixteen years he was chief of the Georgetown Division at District of Columbia General Hospital, supervising the clerkship of third-year medical students.

In 1958, Dr. Hussey was named dean of the Georgetown medical school. Before his appointment to this top position, he was professor of medicine and chairman of the department of medicine at Georgetown. Until last year he was medical editor of *GP,* the journal of the American Academy of General Practice. He held that post for nine years.

Dr. Hussey has very strong feelings about teaching as a career for a doctor. "The choice between full-time teaching and the obligation and devotion to patients is difficult. I had to make the choice, and I turned to teaching. I have not regretted it." ●

Circle OV-214 on reply card, last page


For hard to remove spots
Pure white Institutional Bab-O, with Instant Bleach, removes stains, soil, grease fast. Work-saving controlled foam makes thorough one-rinse action possible—leaves no grit, no powdery deposit. Large, 21-oz. shaker can. (Also in economical 100-lb. drums.)
A full line of Babbitt products is available through your sanitary jobber.
BAB-O
special institutional formula
CLEANSER
CONTAINS BLEACH
If it needs cleaning . . . it needs Babbitt
B. T. BABBITT, INC. · Institutional Division
625 MADISON AVENUE, NEW YORK 22, N. Y.

COLOR DYNAMICS *offers a wide choice of effective color combinations for auditoriums. In this room a color plan of bright, pleasing hues provides a welcome psychological change from the quiet, calm colors preferred for academic classrooms.*

Pittsburgh COLOR

helps you choose colors

Modern painting system improves pupils' work and study habits and efficiency of teachers

Educators in hundreds of schools and colleges all over the country are now using Pittsburgh's system of COLOR DYNAMICS to select colors for school rooms. They have learned that this method of painting is helpful in improving the work and study habits of pupils and the efficiency of teaching staffs.

• **With COLOR DYNAMICS** you choose colors to suit the design and lighting of every school area. You give proper consideration to the ages of students and the work they do.

The warm color in this modern study room was chosen to counteract the effect of harsh natural light from the north. This hue also aids in distributing reflected light.

PITTSBURGH®

PAINTS • GLASS • CHEMICALS • BRUSHES

PITTSBURGH PLATE

IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED

Rooms devoted to the study of homemaking should be bright, cheerful and clean. Here is an example of how COLOR DYNAMICS *can spruce up a home economics room and make it refreshing and inspiring to pupils and teachers alike.*

DYNAMICS®

accurately for every type of classroom

• **Gloomy rooms** are transformed into pleasant, cheerful study areas. Cool relief is painted into rooms that face the afternoon sun. Small, stuffy rooms are made to seem spacious and airy.

• **Eye strain is reduced** and concentration is stimulated. Such improvement enhances the pride pupils and teachers take in their environment and this often helps to discourage vandalism and simplify housekeeping. Try COLOR DYNAMICS in your school next time you paint. You can get all these added benefits without paying more than conventional maintenance painting costs.

We'll prepare a special color plan of your school—FREE!

• **We'll be glad to send you** free a fully illustrated book which explains what COLOR DYNAMICS is and how to apply it most advantageously. Better still, we'll submit a planned color study of your entire school, or any part of it, without cost or obligation. Call your nearest Pittsburgh Plate Glass Company and arrange to have a representative see you at your convenience. Or mail this coupon.

PAINTS
PLASTICS • FIBER GLASS
GLASS COMPANY

Pittsburgh Plate Glass Co., Paint Div., Dept. OV-81, Pittsburgh 22, Pa.

☐ Please send me a FREE copy of "Color Dynamics for Grade Schools, High Schools and Colleges."

☐ Please have representative call for Color Dynamics Survey without obligation on our part.

*Name*_____

*Street*_____

*City*_____

Circle OV-216 on reply card, last page

MORE

★ years of EXPERIENCE

★ ENGINEERING know-how

★ basic PATENTS and

★ MANUFACTURING facilities to meet your

DOME
PLANETARIUM
TELESCOPE

needs for stimulating new interest in the

ASTRO-SCIENCES

Call or write for descriptive data covering a decade of design

U. S. REPRESENTATIVE FOR GOTO OPTICAL MFG. CO., OF TOKYO

ASTRO-DOME
INCORPORATED

1801 Brownlee Ave. N. E.
Canton 5, Ohio
Phone: Area Code
216 - GL 6-8361

SEARCHING THROUGH RESEARCH

Fit Teacher to Job Or Job to Teacher?

THE FIRST annual report of the Educational Facilities Laboratory, written in 1959, drew this picture of the typical classroom arrangement: "In many elementary schools the self-contained classroom is the prevailing pattern—the teacher enters the room in the morning with her class, closes the door, and for the rest of the day, broken only by recess or lunch and possibly the scheduled visit of a peripatetic supervisor, the teacher is expected to be all things to all children all day."

There has been growing doubt over the past few years whether, with the present shortage of qualified teachers, this is the most efficient way to employ the time and talents of good teachers—specifically, whether this teaching arrangement makes the fullest possible use of their professional training.

A number of proposals have been advanced for dealing with this problem of staff use, some of which would differentiate between the tasks within the classroom on the basis of skills required and would then distribute these tasks among personnel on the basis of their levels of training. Among these proposals are the use of teacher aides and the organization of teaching teams.

Several studies of teacher load show how the teacher's time is now being allocated. A National Education Association teaching-load study reported that during a typical week elementary teachers spend 59 percent of their time on class instruction; 25 percent on out-of-class instruction (preparing materials, correcting papers, contacting parents); and 16 percent on such miscellaneous tasks as monitoring, filling out records and report cards, and attending meetings. A Central Michigan College study on staff use found that recitation takes from 20 to 48 percent of the teacher's day; directed study takes from 14 to 23 percent; and a combination of miscellaneous activities, many of which do not require professional competence, takes anywhere from 21 to 69 percent of the day.

These and other studies support the contention that teachers now have to spend far too much time on too many low-level tasks that take no advantage of their specialized skill.

Two criteria are generally used to measure the staffing problem: level-of-employment and level-of-skill. The employment, or recruitment, level is that of getting enough qualified teachers to fill the vacancies. This criterion is met when there are enough teachers available to fill all teaching positions. The supply of teachers is increased while the job stays the same. But this approach does not answer the question of quality or competence.

The level-of-skill approach is concerned with the use that is made of each teacher. It asks that different teaching tasks be recognized in such ways that teachers use their most valuable skills most of the time and, further, that the most capable teachers have the greatest responsibility for pupil instruction. This concept of staff use presupposes that it is possible both to differentiate among tasks based on some estimate of their complexity and to distribute these tasks among personnel on the basis of their skills. In other words, the person who spends a substantial amount of time on the job not using her most important skills should have her job changed or rearranged so that she can make fuller use of her specialized training. This would mean relegating her less-skilled functions either to less-skilled employees or to machines.

Proposals for refining staff deployment by fitting the teaching job to

By Ellis Hagstrom, education instructor at Colgate University, Hamilton, N. Y. His article summarizes some of the literature he investigated for his doctoral dissertation when he was project coordinator of the teaching teams project in Lexington, Mass.

the teacher's skills have taken two directions.

One would let the teacher put her specialized skills to fuller use, keeping within the self-contained classroom arrangement, by providing her with more mechanical aids and with teacher aides.

The other is a search for new classroom organizations under which different teacher talents could be more effectively used, again often in conjunction with mechanical aids and teacher aides. Teaching teams represent one of these organizational innovations.

Reactions to such proposals for better staff use have varied widely. M. L. Hartung, writing in *School Review,* commented: "In these days, pupils and public should be ready to accept the idea that good instruction is being provided even if the experienced teacher is not always in front of the class, explaining, asking questions, and giving directions." R. H. Eckleberry expressed a note of caution in *Educational Research Bulletin;* conceding that the level-of-skill approach merits further study, he warned that "teaching is more than instruction." And Anita Ruffing, writing in *School and Society,* reflected the consensus of the Department of Classroom Teachers that better use of teaching resources is possible under present classroom organizations.

While the National Manpower Council reported that some who attended its conference on the utilization of scientific and professional manpower believed that it was "dangerous, as well as useless, to talk about better use of teachers," others had countered that the current emphasis on knowing "the whole child" had given rise to unwarranted caution regarding "the removal of any present teacher function—clerical, monitorial, or other." Similarly, the report of the Committee for the White Conference on Education stated that "the critical shortage of competent teachers emphasizes the necessity for making full use of the professional talents and energy of each teacher and not dissipating them in tasks not requiring professional competence." ●

Circle **OV-217** on reply card, last page

Permanent color for concrete with KWIK-COLOR

Here's an easy way to give permanent, non-fading color to your concrete floors . . . and eliminate concrete "dusting" forever!

Kwik-Color Concrete Seal is a superior concrete beautifier and preserver made from an emulsified plastic resin.

It is practically odorless, non-inflammable, water-resistant, and easy to apply on either new or old concrete. One gallon covers approximately 800 square feet of concrete.

Dries In Minutes. *Kwik-Color* dries in 20 or 30 minutes. This means that busy floors are back in service within 2 hours after etching, sealing, and waxing!

Kwik-Color is available in *permanent,* non-fading Tile Red, Light Gray and Light Green colors.

The complete, scientific MULTI-CLEAN METHOD for initial treatment of new or old concrete, low-cost maintenance, and restoration of old floors that have previously been painted or sealed is described, step-by-step, in bulletin, "*Multi-Clean Method for Maintaining Your Concrete Floors*".

ANOTHER PRODUCT OF MULTI-CLEAN RESEARCH

For your free copy . . . or for more information on *Kwik-Color,* call your local MULTI-CLEAN Distributor or mail coupon *today.*

MAIL COUPON TODAY!

MULTI-CLEAN PRODUCTS, INC.
Dept. OV-80-81, St. Paul 16, Minnesota

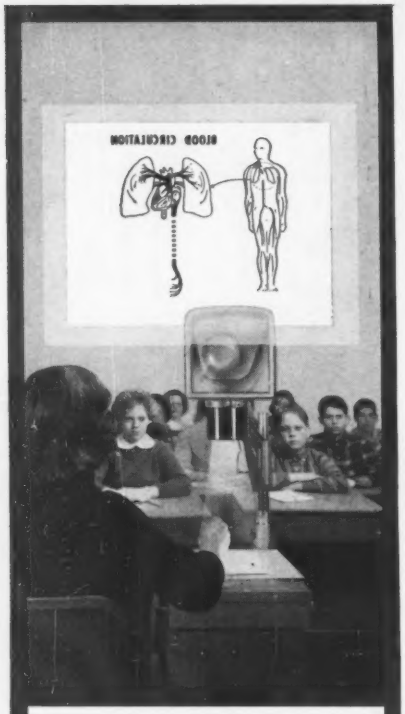
☐ I'd like more information on KWIK-COLOR; also send information on Scientific MULTI-CLEAN METHOD for maintaining: ☐ Asphalt Tile; ☐ Gym Floors; ☐ Terrazzo, Oxychloride; ☐ Concrete; ☐ Rubber Tile; ☐ Vinyl Tile; ☐ Other (specify)_____

Name_____ Title_____

Address_____

City_____ Zone____ State_____

Circle OV-218 on reply card, last page



BESELER
VU-GRAPH
The Right-Hand of Teaching

Operated from the front of a fully lighted room the Vu Graph is a teacher's "electric blackboard." Facing the class at all times, the teacher projects what she writes, as she writes it. A new word appears on the screen the instant she says it . . . step by step a problem is solved before the eyes of the entire class as she explains it. Almost without effort the Vu Graph becomes her "right hand of teaching."

To learn about the specific benefits of Vu Graph Overhead Projectors for your school write for a free, "no obligation" demonstration . . . or "Vu Graph As An Instructional Aid," a free, informative booklet written for teachers by teachers.

CB PROJECTION DIVISION
CHARLES BESELER COMPANY
210 So 18th St East Orange, New Jersey

From Washington

Moving Day for the U. S. Office

FOR MONTHS Washington has watched the construction of a sleek seven-story federal office building across the street from the Department of Health, Education, and Welfare headquarters. Competition is keen among federal agencies for modern office quarters, and lunch-hour sidewalk superintendents often speculated on the identity of the fortunate new tenants.

To the surprise of many, most of the new glass and marble building will be occupied by the burgeoning U. S. Office of Education, which has been housed in cramped quarters in the main HEW building, assorted prefabs, and a former government warehouse. The National Aeronautics and Space Administration is the only other agency high enough on the bureaucratic totem pole to rate admittance to the new building.

Obviously, the U. S. Office of Education has risen in status. Its staff and its budget have doubled in the past five years and its grants and contracts now total about half a billion dollars annually. The Office today is far more than a mere statistical clearinghouse. Six out of ten USOE employees execute federal policies affecting education.

Some welcome the USOE's expansion as an indication of a larger federal role in education; others oppose it for the same reason. Still others strongly support a larger federal investment in education but adamantly oppose the USOE's extensive involvement in the formulation of national educational policy.

These attitudes toward the Office were challenged in the recent report of the Committee on the Mission and Organization of the USOE, "A Federal Education Agency for the Future." As a result, this 56-page pamphlet was denounced by Raymond Moley in *Newsweek* magazine, by Fulton Lewis, Jr. on his network radio program, and by Rep. Glennard P. Lipscomb (R-Cal.) on the floor of the House of Representatives.

The controversial report was commissioned by the previous Administration when then Secretary Arthur Flemming asked all HEW units to make ten-year estimates of their future goals. Former Commissioner Lawrence G. Derthick thereupon appointed the USOE's Mission and Organization Committee—composed of twelve career officials and chaired by the assistant commissioner for higher education, Homer D. Babbidge, Jr.—to develop "a clear-cut and balanced statement of the mission proper to the Office of Education over the next decade, and a reasonably detailed outline of an organizational structure" to carry it out.

"A Federal Education Agency for the Future" is far from a blueprint for federal control. Its authors hold that, "Despite the significant changes that have taken place in the federal role in education, the 'center of gravity' in American education rests well outside the Federal Government." The report, therefore, urges "strengthening of the Office's time-honored functions in the area of professional assistance to education as it is organized."

But the USOE committee also agreed that "out of the increasingly active role of the Federal Government in our society, emerges yet another new function and responsibility of the Office of Education . . . it must assume the role of a voice of conscience within the Federal Government, speaking for the long-term na-

---

Theodor Schuchat, OVERVIEW's new Washington correspondent, has covered the Capital for ten years as freelance writer (New York Times Magazine, Christian Science Monitor, Saturday Review) and government staffer (HEW, Public Health Service, Bureau of Labor Statistics). Erwin Knoll, our former correspondent and an Education Writers Assoc. award-winner this year, has been elevated to National Affairs on the Washington Post.

Circle OV-219 on reply card, last page

Why Every School needs the Airkem Program for Environmental Health!

Everybody benefits! Children "do better in school." Illness drops, attendance climbs. Teachers, parents and visitors notice a big difference when you put the Airkem program to work and bring a clean, odorless, agreeable and *healthful* new "climate" into the school.

The Airkem program gets to the heart of the problem. It thoroughly cleans all surfaces. It kills germs and other microorganisms. It kills insects. It kills odors by counteracting them. And it gives an air-freshened effect without adding obnoxious perfumes or chemical smells. It is the only *complete* program of basic sanitation maintenance.

There's no mystery about it! All you do is make sure the proper Airkem product is used in its proper place in the school. Procedures are simple—and they actually *save money and time* by combining several housekeeping jobs in one, freeing your maintenance staff for other work. Inquire!

See opposite column for one specific Airkem benefit ▶

airkem

AIRKEM
For a Healthier Environment through Modern Chemistry

tional interest in education, in contrast to the voices that speak of a shorter-range federal interest in the many uses to which education can be put."

The report cites the newer responsibilities of the Office that are implicit in the twenty-odd laws it already administers. It now conducts massive federal programs, aids and monitors education abroad, and helps develop the national educational policies enunciated by the President. The new duties, in the opinion of the Committee, call for a new organizational structure and even a new name for the USOE.

The U. S. Education Agency envisaged by the Babbidge report would consist of an expanded Office of the Commissioner plus bureaus of higher education assistance programs, state assistance programs, international education, and educational research and development. A lay national board of advisors would be appointed by the President to consult with the Commission.

When he issued the Babbidge report in April, Commissioner Sterling McMurrin noted that legislation would not be needed to adopt most of these organizational changes. He and his superiors, embroiled in legislative controversy, have been understandably reluctant to rock the boat by recognizing the USOE while Congress is in session.

But after Congress adjourns, the Babbidge report may well be filed and forgotten. "Many powerful groups prefer that the Office continue to serve primarily local, state, or institutional policies rather than a national policy in education," one member of the Babbidge committee admitted. "If the Public Health Service or the Food and Drug Administration were comparably dedicated to the interests of specific professional or trade groups, it would be considered scandalous."

The American people, in the opinion of this public servant, deserve an Office of Education, by any name, in which service would be considered the summit of professional ambition, not a mere stepping-stone to a position with a major school system, or university.—THEODOR SCHUCHAT

Circle OV-219 on reply card, last page

Keep your Rest Rooms Safe from Health Hazards!

Is any school official ever satisfied with conditions in the rest-rooms? Beyond question—some are. Those who utilize Airkem techniques can be justly *proud* of the cleanliness, the freedom from odor, the healthful environment produced in school rest-rooms through the use of three specialized Airkem products.

One is the Airkem bowl-cleaner. It quickly dissolves encrusted uric acid salts, and keeps fixtures gleaming clean without endangering metal or porcelain parts. Another Airkem product specifically counteracts urine and fecal odors. The third cleans *and disinfects* all surfaces—walls, floors, fixtures—and imparts an air-freshened effect without adding obnoxious perfumes or chemical smells. Acting together, these Airkem products perform the complete task, yet without imposing an additional work-load on your maintenance staff. It's a hard job made easy—a hard job well done—by Airkem! Call your nearby Airkem man.

FREE!

5-gal. pail of Airkem A-3 Only cleaner-disinfectant that produces air-freshened effect! Regular $16 Value

Offer expires 60 days after publication date of this magazine. Offer limited to one per school.

airkem

John Hulse, Airkem, Inc. Dept. O-8
241 East 44th Street, New York 17, N.Y.

Send representative to make free survey of our sanitation maintenance practice, demonstrate Airkem procedure and deliver FREE 5-gal. pail Airkem A-3.

Name_____

Title_____ School_____

Address_____

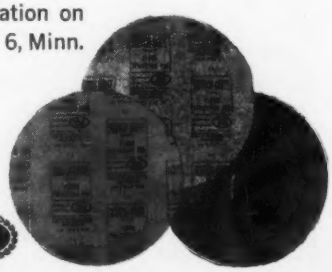
City_____ Zone____ State_____

Circle **OV-220** on reply card, last page

3M System keeps floors so new looking you can hardly believe your eyes . . . . .

Now with 3M's new spray method and "SCOTCH-BRITE" Floor Maintenance Pads you can keep floors new looking week after week after week. This new spray method lets you clean and polish floors in one simple operation. Your floors are kept at a higher level of appearance with less strippings.

The 3M spray method and "SCOTCH-BRITE" Pads can give you dramatically pleasing results on even your heaviest trafficked floor areas. These unique non-woven Nylon pads never splash or rust . . . can be rinsed in water, dried quickly and re-used. Let us show you how regular floor care with "SCOTCH-BRITE" Pads can cut your maintenance costs and improve your floor appearance. For a free demonstration on your floors, write: 3M Co., Dept. ABW-81, 900 Bush Ave., St. Paul 6, Minn.



"SCOTCH-BRITE" Floor Maintenance Pads

BRAND

"SCOTCH-BRITE" IS A REGISTERED TRADEMARK OF 3M CO., ST. PAUL 6, MINN.

MINNESOTA MINING AND MANUFACTURING COMPANY
. . . WHERE RESEARCH IS THE KEY TO TOMORROW

3M COMPANY

Are Americans Over-Testing?

THIS MONTH AND NEXT, the cycle will begin anew: standardized aptitude and achievement tests, diagnostic tests, performance tests, interest inventories, federal service exams, scholarship exams, and dozens more. Administrators will tack a half-Saturday onto the school week, alter class schedules for a three-hour predictive battery, or put examiners on overtime pay. IBM card sorters, readers, and printers will hum 'round the clock translating millions of test scores into the proper stanines, percentiles, ranks, norms, equivalents, and V-scales. All told, about 125 million standardized tests will be given between September and June.

That total is impressive, for it is just shy of *three times the total enrollment of all students in public and private education, from kindergarten through graduate school,* in the United States. Expressed another way, an average of nearly three standardized tests is given each year to every enrolled student in the country. The current extent of testing, as well as its predicted rate of expansion, is causing educators to take a close look at what is—and is not—accomplished by standardized tests.

In *The Fifth Mental Measurements Yearbook* (Rutgers, 1959), editor Oscar Buros lists 957 published tests. The great majority of these are highly specialized: Rosenzweig's Picture-Frustration Study, Family Life's Sex Knowledge Inventory, or E. D. Chapple's Interaction Chronograph. Many are subjective performance tests, administered on a one-to-one (tester-testee) basis. But about twenty standardized tests are quite familiar to educational executives in public and private schools. Among these are the College Entrance Examination Board (CEEB), NROTC Scholarship Program, National Merit Scholarship Examination, Betty Crocker Scholarship Program, Kuder Preference Record, the young and fast-growing American College Testing Program, and several batteries or "packages," such as the SCAT-STEP Series.

Standardized tests are not, however, only national in scope. Since the passage of the National Defense Educa-

tion Act in 1958, the U. S. Office of Education has been dispensing $15 million a year (under Title V) to help each state mount its own standardized testing programs. J. Thomas Hastings of the University of Illinois reports that since 1958 every state has mounted at least one program of its own. Many states have more than one. New York leads with no less than ten; Ohio, California, and Kansas each have between five and nine. (Some states have gone on a buying spree with NDEA money and have encouraged local school systems to run tests chiefly to reduce an embarrassing inventory.)

The largest single group tested are elementary school children, but the group exposed to the greatest variety of tests and under the heaviest testing pressure are secondary school students. They face batteries of tests each year to qualify for scholarships, college admissions, job placement, and "better personality development." In one year it is not unusual for a high school student to put in the equivalent of three full working days and to pay $20 in fees for the privilege of having his brains picked by external, standardized tests.

JUST HOW MUCH good these tests accomplish is still an unanswered question. When each is carefully selected, intelligently administered and scored, and placed in a scale with many other elements of the human personality, tests do contribute some valuable information. Certainly such cases as John Flanagan's work with the Air Force during World War II are common enough to give testing a legitimate place in education. But there is mounting evidence pointing toward "over-testing": the same student taking different tests that reveal essentially the same things, tests being given and improperly interpreted, tests being given and the scores not realistically interpreted at all.

Test-making is a highly sophisticated art which has attracted some of the keenest minds in education—Lewis Terman, David Wechsler, E. F. Lindquist, Robert Thorndike, and others. Critics of testing often equate the test-writer with the test-seller. Such an equation may once have been appropriate, but not any longer. The presence of state and federal money, plus the intensified competition among publishers, now require that a clear distinction be made.

While the test-writers speak freely of the "bugs" in their own work and carry out exhaustive research to correct them, the test-seller heads in a different direction. Publishers are coming perilously close to swapping the cap and gown of scholarship for the gray flannel suit of salesmanship in order to recoup the enormous investment each of their tests demands. Science Research Associates issues gold-bordered certificates with its Educational Development Test. The California Test Bureau announces ". . . one of the most useful pieces of information the teacher, principal, researcher, or curriculum expert could ever hope for—the Right Response Reader." Even Educational Testing Service (a non-profit organization) protests too much, saying in a handsome little brochure that their Scholastic Aptitude Test " . . . provides college admissions officers and high school counselors with a common gauge which measures the same degree of ability in Maine as it does in California."

Bombarded by this kind of pressure, the average educational administrator has uttered a cry for help. Three groups (the American Association of School Administrators, the Council of Chief State School Officers, and the National Association of Secondary-School Principals) heeded the cry and formed the Joint Project on Testing. Charles Holt, the able director of the Joint Project, has reported out some of his findings:

"The external programs involving the greatest number of students are in connection with college admissions and scholarships. Much of the duplication in testing is caused by the requirements of a particular test on the part of external agencies such as colleges, scholarship donors, or state agencies. These programs preclude the possibility that schools can make a choice from among the competing programs. Because of the requirements of specific tests, it makes small difference whether a school prefers one program over another or even whether the testing is duplicative or redundant."

Holt cites the mismanagement of NDEA funds and other causes of over-testing and recounts some of the less formal pressures put upon school administrators:

"We are *expected* to participate. Other schools do, we must . . ."

"Public gullibility to testing as a panacea . . ."

"The school is placed in the position of denying children if it does not participate in every testing program offered . . ."

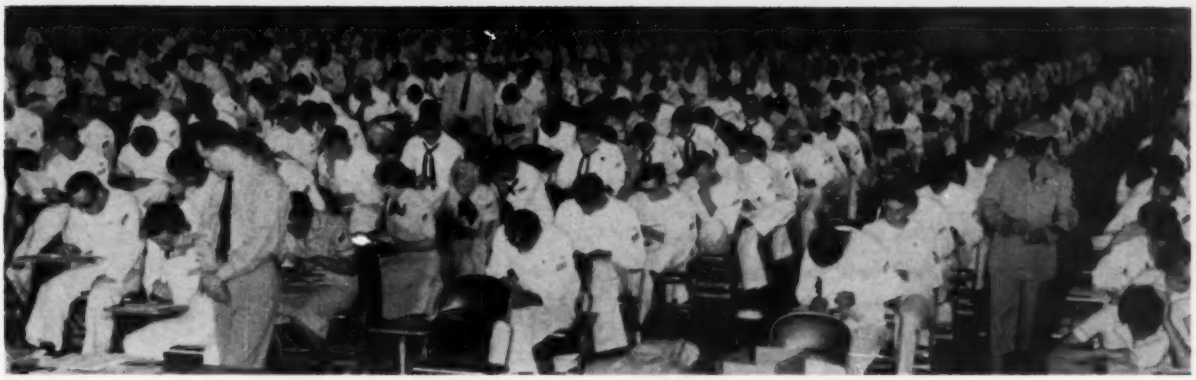
"Guidance counselors are becoming increasingly defensive . . ."

"The quality of education is currently measured, to a large extent, upon the basis of student achievement in national and state testing programs. . . ."

OF THE FEW generalizations that have stood the test of time in education, one is this: If a student does well in school, chances are he will do well in college. The hitch has been to communicate to the college what "doing well" means in the school. Because differences between schools can be so great, while innately intelligent children can be found anywhere, the standardized college admissions test has seemed to be the best tool possible for higher education. It also prevents colleges from gathering in too many low-ability students and then flunking them out at a set rate. However, the most frequent voices raised against the admissions test are from college and university people themselves.

"The student's record after he gets to college tells a much better story than pre-college data," says F. Chandler Young, assistant dean of the University of Wisconsin's College of Letters and Science. Young watches college students to come up with success factors and pays no attention to the student's high school "cumulative record."

In 1956, the University of Kansas admitted 208 students who had *failed* their freshman college entrance tests. Four years later, on the eve of their graduation, the university told the world how they'd done: forty-six made



Electronic processing makes mass testing feasible; all Navy's tests, e.g., are scored at its computer-equipped examining center.

the dean's honor list, six made honor societies, one was elected to Phi Beta Kappa.

Formerly, only the mavericks on campus would pooh-pooh the college entrance exam. Now the topic is not only respectable, but widespread. Michigan researcher R. M. W. Travers sums up his colleagues' feelings when he says flatly, "We must have a measure of a student's actual work in college in order to say he is college material."

ONE OF THE key complaints of admissions and scholarship personnel—and a legitimate complaint at that—is the chaos in secondary school reporting. Meticulous reporting produces unmanageable volume during the spring admissions "season." Thumbnail, rough records are not trusted. But deeper than this is the competency of the people actually doing the reporting.

Benjamin Shimberg of ETS has found that "one school in ten has a full-time counselor; four in ten 'make-do' with part-time counselors; five out of ten have no one on their staffs who devotes even part of his time to counseling. All told, there are about 20,000 individuals doing counseling in secondary schools." After adjustments, it turns out to be "equivalent to something like 12,000 full-time counselors." This, then, is the number of test-involved individuals in the nation's 30,000 secondary schools. Most of them are, in fact, classroom teachers. Here, the picture becomes seriously clouded.

Six years ago, Victor Noll of Michigan State surveyed the situation and his results can still stand: "Only four states required a course in measurement for certain teachers' licenses and none required it for every type. . . . One must conclude, therefore, that a course in measurement for a teacher's certificate is a comparatively rare requirement and even recommendation of such a course as an elective is not common."

There is a discernible trend in the direction of more in-service training for teachers in the complex art of measurement. Noll asks for more workshops, institutes, attendance at summer school, correspondence and extension courses, and supervision on a scale greater than is now practiced. The National Council on Measurement in Education has set up a committee on in-service education to keep professional educators both informed and interested. Committee chairman Benjamin Rosner sees the challenge clearly: "The evaluation of professional competence [in measurement] is a professional responsibility. . . . Educators must provide the necessary training to ensure this competency."

Administrators of formal educational programs are not alone, however. The burden of straightening out the over-testing situation must be shared by other educational groups. Most discouraging is the lack of understanding by industrial and commercial personnel specialists about what tests are for. As a group, they seem unconcerned that a job applicant may have already taken such tests as TEA, TOGA, TAT, DAT, FACT, GAT, YEP, and Kuder. (Testers are peculiarly smitten by alphabetitis.) Their first impulse is to devise yet another test of their own or even repeat tests an applicant had taken at school. Among the most popular are the Minnesota Clerical and the Wonderlic, a short version of the Otis Self-Administering Test. Most test publishers will gladly make minor alterations in a standardized high school vocational test to fit the special needs of a particular company or industry.

Of course, were a personnel officer or training director to query a school for an applicant's test record, he would get a firm "No." Such scores are confidential (or "dead-ended"). Schoolmen have sound reasons for keeping them so, and people on the hiring end are well aware of them. Norman Miller, training director at the Union Railroad Company, East Pittsburgh, is fairly typical. He has one cardinal rule for his own testing program: "Never tell anyone the results of tests except the person who took the test." Laudable as this may be, the virtue is enjoyed only by the tester. The testee faces a testing treadmill of small virtue.

The testing pattern in American education is highly complex. The loudest voices for "local control" in all other aspects are frequently in that chorus which demands curriculum changes to satisfy national test questions. Well-meaning souls who would deny no child the opportunity to advance himself through a nation-wide test will frequently bungle the administration or score-reporting of the tests. In an effort to refine scoring, conscientious test-makers cultivate a near-hopeless jungle of reporting. Reforms are urgently needed, as leaders of the most powerful professional organizations bluntly admit. Efforts such as the AASA-CCSSO-NASSP Joint Project are crucial and demand the support of the profession. And the profession, apparently, is ready to work. ●

Basic Choices in Vocational Education

by Edward Hankin

DETERMINING THE best organization for an industrial education program is much more difficult than for other kinds of vocational training. Home economics, agriculture, and distributive education, for example, can each be handled in a single curriculum with a minimum of specialization, and will fit easily into a comprehensive high school program. Industrial training is different because each skilled trade or technical occupation requires individual training in highly specialized shops or laboratories.

The enormous diversity of industry's labor needs is shown in a report by the U. S. Office of Education on high school graduates in twelve northeastern states who had enrolled in *ninety-nine* trade and technical curriculums. The Florida State Department of Education alone has released a list of ninety-one trade and twenty-five technical curriculums offered in that state's high schools. Obviously, even a large school could not offer all the curriculums, though some schools offer more than thirty and many offer more than ten.

One of the major problems of providing diversified industrial training is the high cost of building and equipping adequate teaching facilities. Trade and technical schools need a lot of bulky and costly equipment. For example, a good course in automotive mechanics would require a couple of recent-model cars for students to work on, several different engines, lathes, an acetylene torch, and many sets of mechanics tools.

Industrial leaders are keen on helping schools with their equipment problems because of their vested interest in good industrial training programs. Kalamazoo, Michigan, is a case in point. This city's metal-working companies require a constant supply of trained machinists—more than 100 yearly—to meet expansion needs. Accordingly, a number of Kalamazoo High School students take training in machine tool operation—instruction in mathematics, blueprint reading, mechanical drawing, and the care and use of lathes, drill presses, and milling machines. Local companies who benefit from the program supply metal-trades equipment and advice on how training should be carried out. The program has already begun to reduce an acute shortage of semi-skilled and skilled metal workers in the area.

An indication of the strong interest of employers in vocational training for industry turned up in a survey run this spring by the Kingston, New York, school system. Significantly, Kingston employers said they drew most of their workers from the local labor market but added that they often had to go out of town to get skilled help. They split evenly in their opinions of the local schools: 38 percent said they felt the vocational training given their

---

Dr. Hankin is head of the vocational and adult education department at Florida State University, Tallahassee. He came to education via private industry and has been president of the Florida chapter of the American Society of Training Directors.

employees had been adequate and another 38 percent said it was inadequate (the rest were undecided or hired few blue-collar workers). In addition, 40 percent said they would be willing to work with the schools on a work experience program.

The work experience program is expected to relieve school systems of some of the burden of building, equipping, and staffing vocational training shops. Such training is always up to date because it is done in connection with actual production jobs under the supervision of trained craftsmen.

Any discussion of industrial vocational education invariably leads to the question: should it be offered separately or as part of a comprehensive high school program?

Separate Vocational Schools?

There are several arguments favoring a central vocational high school which serves students from the entire school system.

It can function as an independent unit and be equipped with facilities to provide fairly complete trade and technical training, at least in terms of local job opportunities, plus the required minimum of academic hours. Many curriculums can be offered in a vocational school since all students wanting a particular kind of training are taught under one roof.

Another popular method for separate training is the single vocational high school that provides only shop and related pre-job instruction. Students are enrolled in regular high schools within the district for the academic portion of their secondary education and are transported to the vocational school for their several hours of shop work each day. The objectives of this plan are good. However, it has several administrative, instructional, and social drawbacks: a lot of time and money is spent shuttling back and forth; class scheduling is more complicated; and students miss out on some of the important social and educational experiences in their "home" schools.

At least four good reasons can be cited for providing separate vocational schools:

1. They can more effectively prepare students for specific jobs.
2. They can develop closer working relationships with industry, keeping instruction geared to employment demands.
3. They can enroll more students from the whole school system and offer them a greater variety of vocational courses.
4. They ease class scheduling problems. Curriculums in industrial education require three consecutive hours of shop instruction daily. Obviously, this requirement can be scheduled around more easily in a separate vocational school.

Part of Comprehensive Schools?

The alternative is to establish industrial vocational training as a single, large department within the comprehensive secondary school.

This arrangement restricts the variety of curriculums that the school can offer. And if the district is large enough to support several comprehensive high schools, each with its own vocational department, there would inevitably be much curriculum duplication.

But there are two strong arguments in favor of industrial training within a comprehensive high school program:

1. Separation tends to foster undemocratic class distinctions that are inimical to the development of a cohesive society. Any system-wide organization that tends to create class lines and class consciousness by separating the "blue collar" from the "white collar" students is deemed harmful. High schools that include shop training as an integral part of secondary education are considered by some educators to be most effective in achieving student solidarity and good fellowship. (Some educators counter this argument by reporting that even comprehensive schools cannot avoid a schism between industrial students and the rest of the student body. They contend that separate schools can be operated so that enrollment in them is considered a privilege reserved to qualified students, enhancing the self respect of the vocational students and upgrading their image in the minds of others.)
2. Only comprehensive schools can adequately meet the non-vocational needs of vocational students. The argument is that art, music, athletics, and social activities are best provided in a comprehensive school. It is felt that a high school education must train graduates for good citizenship, for leisure and for family life, as well as for a career. However, when a vocational school is large enough, most of the non-vocational needs of students can be provided through regular studies and enrichment programs. An overriding factor is the effort made by teachers and administrators to erase the disadvantages of either system.

Basically, the number of vocational curriculums in a school and their enrollments depends on two factors: Are their enough local job opportunities in a given field to justify a course? And are there enough students with the aptitudes and job interests to justify a course?

The first question is particularly vital. Administrators should do everything possible to stimulate employer interest and involvement in secondary vocational education. Employers can best indicate what jobs are available and can play a key role in setting up effective programs. Also, close contact with potential employers is vital to post-graduate job placement.

There is no "best" way to organize industrial training to fit every school system. But where conditions permit, the best solution is probably a separate, centralized vocational school. Not only do such schools provide broader training, they also allow more efficient use of tax dollars for capital outlay and lower per-pupil operating costs.

In the years ahead, vocational education will have to meet many stiff challenges created by the constantly changing job needs of industry as it shifts into automated methods. If these challenges are to be met successfully, educators must give thoughtful study to the problem of vocational education so that they will have made the right choices beforehand. ●

Michigan Has a Date with CHAOS

by Stuart Gross

Public apathy and legislative indifference may close college doors to the "baby boom" class of '65

MICHIGAN COLLEGES are headed for chaos in 1965, but the greatest damage will be felt by the secondary school people.

The innocent victims in this impending crisis are the thousands of extra youngsters in the class of '65 which moves into the ninth grade next month. This is the "baby boom" class—the largest ever to move through the primary and secondary schools. It is the first rush of the tidal wave of youth that experts predict will double the number of college enrollments by 1970—provided there is college classroom space to handle them.

The word "provided" is looming larger with each passing day in Michigan. Other states also have pressing college problems, but Michigan's is unique, and it is being aggravated by public apathy and failure of the secondary school officials to acknowledge their responsibility in reaching a solution.

Michigan has come through a period of severe financial stress that still is not solved, and the Legislature is in no mood to discuss spending many millions of dollars more on higher education expansion. Building bond issues and new tax levies are not popular subjects to a politically-minded legislator. Unfortunately, this public apathy and legislative indifference may close college doors to thousands of this year's ninth-graders.

A large proportion of Michigan's youngsters must depend on state colleges for higher education. This year, Michigan's nine publicly-supported colleges enrolled 75.7 percent (105,617) of the state's 139,512 college students. The state's one large private college, the University of Detroit, enrolled 10,846. (In a U.S. Office of Education survey of four large states, Michigan ranked highest in the proportion of students enrolled in public colleges; California is second at 67.1 percent; Ohio is third at 55.2 percent; and New York is fourth at 31.1 percent.) What this adds up to is that Michigan taxpayers must dig deeper to finance college expansion than taxpayers in other states. Michigan cannot look for private colleges to help in any great extent.

The last census clocked Michigan as one of the fastest-growing states in the nation. Population surveys show that by 1965 Michigan will have about 40,000 *more* high school graduates than it will have in 1964. The Labor Department identifies these students as potential additions to the labor market. An educator sees in them a potential for college enrollment that the colleges in their present state won't be able to cope with.

The colleges are straining to handle present high school graduates. Dormitory rooms are crowded and classroom space is at a premium. The situation is termed "intolerable" by Dr. John Hannah, Michigan State University president. He expressed the sentiments of Michigan higher education when he said: "We had hoped the Legislature was going to embark on a long-range building program. All we've seen so far is a bonding program to complete buildings now underway."

Dr. Paul Miller, MSU chancellor, told the Legislature about the need for a new chemistry building. He termed the present facility a "catastrophe" with one office in a former restroom and doctoral students waiting up to two months for available laboratory space.

There is no evidence that the public or local officials have been awakened to the problem. The Michigan Congress of Parents and Teachers, Michigan Association of School Administrators, Michigan Association of Secondary School Principals, and Michigan Association of School Boards have yet to go on record urging the Legislature to allocate money for new college classrooms.

Yet, principals and superintendents proudly point to the increase in their counseling staffs and predict these counselors will motivate more students toward college. Parents are increasingly eager for their children to get a college degree. According to the University of Michigan, the proportion of Michigan high school graduates who entered college grew from 27 percent to 36 percent in ten years. Half the families in Michigan today hope to send their children to college.

A lot of families are going to be disappointed unless there is a major building program. With colleges forced to become increasingly selective in admissions policies because of the numbers of students applying, what will happen in 1965 when 15,000 to 20,000 more freshmen than in 1964 will seek admittance?

Dr. Lester Anderson, of the University of Michigan and state committee chairman of the North Central Association of Colleges and Secondary Schools, has a bleak answer: "There simply isn't enough room in Michigan colleges to accommodate youngsters who will want and should go to college and some youngsters are

---

Mr. Gross, education writer for **The Saginaw (Michigan) Times,** won the Michigan Education Association award this year for his school reporting.

going to get hurt." He also said the public blame for the coming mess is going to fall hardest on school boards, principals, and superintendents because parents will come to them and ask: "Why can't my child get into college?"

Michigan's nine state-supported colleges include the University of Michigan's senior branch at Flint and its Dearborn Senior College and Michigan State University's branch at Oakland. This year the Legislature gave these three schools a total of $7,856,181 for capital improvements. By law, dormitories can be built with revenue bonds but all classrooms and laboratories must have legislative approval before they can be built because they are financed with tax money.

Dr. Lynn Bartlett, state superintendent of public instruction, calls the capital-improvement allocation by the Legislature a "pittance." He said the colleges have estimated their need at $400 million to build classrooms and laboratories to get ready for 1965. Unless this expansion takes place, Dr. Bartlett warns: "Only the financially elite will be able to afford a college education in Michigan."

THE PICTURE isn't all black. Last year the Legislature did authorize the establishment of Grand Valley College near Grand Rapids. But no money has been appropriated for construction, and the college exists only on paper.

Two schools, MSU-Oakland and Kalamazoo College (private), will go on a year-round basis to speed up the educational process. The University of Michigan is studying the trimester. But officials say that while these reorganizations can move a student through college more quickly, they will not permit a college to increase its enrollment in any one semester.

The counties of Saginaw, Bay, and Midland joined to build Delta Community College, a two-year school. The district taxed itself for an $8 million building plus an operating levy that returns $500,000 a year. Delta opens next month, but it will not add to the number of state colleges; when Delta opens, Bay City Junior College will close.

The state has sixteen junior or community colleges. Dr. Bartlett has said this number must double to meet the coming crisis. Michigan's community colleges are financed by local property taxes, state aid ($205 per student this year), and tuition. They are becoming an increasing burden to local property taxpayers and, as they expand, a greater drain on state coffers. In his annual report, Dr. Bartlett said:

"Present local tax resources are being stretched to the limit for elementary and secondary education and other local governmental costs. Although local communities desire to support their community colleges with local taxes and tuition fees, they are finding it increasingly difficult to do so."

But while officials talk of expanding the community colleges in order to distribute the weight of the college enrollment problem, there is no talk on the obvious question that must be answered sooner or later: Isn't the creation of more community colleges only delaying by two years the problem of the *four*-year colleges?

New York and Pennsylvania have master plans for expanding their higher education. Michigan has none, other than the John Dale Russell report which points to the need for more college classrooms and recommends state colleges be built at Grand Rapids and Saginaw. Gov. John Swainson has asked the Legislature to create a Commission on Higher Education to help in this situation, but the request may have come too late for the class of '65. A study of this type can't be done overnight, and a tax program to finance it has to be fought through the Legislature from Senate to House.

FEW BELIEVE that the Legislature will take positive action on the college situation until there is a compelling mandate from the home districts of every state senator and representative. The colleges alone cannot whip up public demand; they need the help of the local PTA, principal, superintendent, and school board.

The colleges must take their hat in their hand and go to the local school officials and ask for this support. They must present the entire case so the principals and superintendents will understand their own position in the matter. Unless the colleges are willing to do this, they might just as well stop talking about a crisis. They might also take a tip from Illinois which put over a $195 million bond issue for university expansion last November. The college students themselves conducted a statewide publicity campaign, speaking before high school assemblies and preparing tapes and films for radio and TV stations [see May's *Communications Clinic*].

Colleges and high schools could combine to help dramatize the situation to the public. Now, a high school in Michigan does not know how many of its graduates actually enroll in a college; it knows only the number who *apply* for enrollment. If colleges would report to the high schools the names of their graduates who are actually enrolled, a high school could have an accurate check of which students made it and which didn't. In this way the public could learn how many graduates of a given high school were accepted and how many were turned away.

The colleges could do one more thing. They could stop trying to play Lady Bountiful and squeeze into dormitories and classrooms more freshmen than they know they can handle, and then proceed to solve their overcrowding by flunking out a necessary percentage the first year. This is expensive and it is cruel. It's tough enough for a student to move from a home atmosphere into a college atmosphere; he shouldn't be forced to play Russian roulette with a curve marking system that automatically relegates so many students to the A group and so many to the F group. Deciding in advance that a fixed percentage of a class must flunk out each year is hardly in keeping with the American philosophy that every child is entitled to an education to the limit of his ability.

If this is Michigan's best solution to its higher education problem, then it, too, merits an F. ●

gobbledygook: the art of non-think

by Herman Spivey

I WISH TO complain about a bad habit, contagious and therefore dangerous, which some scholars have, and which all of us are liable to if we don't watch out: gobbledygook.

You will not find "gobbledygook" in the dictionary, but you will find its abundant use in scholarly writing. The nearest synonym is *expertise,* but that is not in the dictionary, either, as it shouldn't be in practice. It means something like *cant, argot,* or *jargon;* but *gobbledygook* refers not only to these but also to unnecessarily involved sentences and fuzzy phrases and clauses.

It is becoming increasingly harder for people to understand one another, especially scholars, at a time (ironically) when the learned disciplines are becoming more interdependent, when improved transportation and communication media are bringing people and events closer together, and when world peace depends more than ever on world understanding.

No scholarly profession has a monopoly on gobbledygook. You'll find it in law, medicine, and sociology, as well as education, as some examples will show. And in each case the fault is not so much technical language as it is fuzzy thinking.

Here are two scholarly sociologists saying essentially the same thing, one in gobbledygook and one in English:

Example

An element of a shared symbolic system which serves as a criterion or standard for selection among the alternatives of orientation which are intrinsically open in a situation may be called a value. . . . But from this motivational orientation aspect of the totality of action it is, in view of the role of symbolic systems, necessary to distinguish a "value-orientation" aspect. This aspect concerns, not the meaning of the expected state of affairs to the actor in terms of his gratification-deprivation balance but the content of the selective standards themselves. The concept of value-orientation in this sense is thus the logical device for formulating one central aspect of the articulation of cultural traditions into the action system.

. . . It is the inherent in an action system that action is, to use one phrase, "normatively oriented." This follows, as was shown, from the concept of expectations and its place in action theory, especially in the "active" phase in which the actor pursues goals. Expectations then, in combination with the "double contingency" of the process of interaction as it has been called, create a crucially imperative problem of order. . . .

The problem of order, and thus of the nature of the integration of stable systems of social interaction, that is, of social structure, thus focuses on the integration of the motivation of actors with the normative cultural standards which integrate the action system, in our context interpersonally. These standards are, in the terms used in the preceding chapter, patterns of value-orientation, and as such are a particularly crucial part of the cultural tradition of the social system. (Talcott Parsons, *The Social System*)

Translation

People often share standards and expect one another to stick to them. In so far as they do, their society may be orderly. (Example quoted and translated by C. Wright Mills in *The Sociological Imagination*)

Doesn't Mr. Mills mean the same thing as Mr. Parsons? Sociology may be conspicuously characterized by jargon because it is a comparatively recent learned discipline and many sociologists may seek status through highly specialized language, as often happens in new disciplines. Consider, for instance, the writings of the "New Critics" of the 1950's whose literary essays were larded with arcane terms like "nexes" and "dichotomy." Here is another example of gobbledygook from sociology:

Example

Sociology [has to do with] that aspect of the theory of social systems which is concerned with the phenomena of the institutionalization of patterns of value-orientation in the social system, with the conditions of that institutionalization; and of changes in the patterns, with conditions of conformity with and deviance from a set of such patterns, and with motivational processes in so far as they are involved in all of these. (Parsons again)

Translation

Sociologists of my sort would like to study what people want and cherish. We would also like to find out why there is a variety of such values and why they change. When we do find a more or less unitary set of values, we would like

Dr. Spivey is the plain-talking, clear-thinking vice president of the University of Tennessee.

to find out why some people do and others do not conform to them. (Mills' paraphrase)

In drawing up wills or reading leases most of us have stumbled into lawyerese. This profession can also talk in gobbledygook. Two years ago, a witness before the Superior Court of Utah translated a lawyer's gobbledy-question:

Example

Lawyer: "Was there, postwar, in your thinking, a degradation in the individual concept of responsibility toward charitable or educational or public welfare contributions?"

Translation

Witness: "In other words, did individuals give less?" (quoted by Jacques Barzun in *House of Intellect*)

And here is an example from an article in the *American Economic Review* on the danger of businesses and labor unions growing too large:

Example

Do we not see here [in the recent steel strike showing the major steel companies in unison and the major labor organizations in unison] the race for countervailing power generating a trend toward cartelization of industry by the back door that we have persistently turned back at the front door under our anti-trust principles? Whether or not the Department of Justice will challenge this development remains to be seen. Thus far the monolithic labor suzerainty has been able to maintain substantial immunity from the anti-trust laws. Something radical or at least showing sparks of inventiveness now needs to be done to check the erosion of that competitive flexibility that is essential for an enterprise economy to deal with real operative situations. (Professor Edwin Nourse)

Translation

Large corporations and powerful unions have introduced the factor of size into the American economy. In an effort to maintain their own self-interests, corporations and unions individually or jointly may overlook the welfare of the remainder of the nation. Our outdated anti-trust principles need to be reviewed in the light of these conditions. A fresh look at the economy and some imaginative planning for the future are in order. (I *think* the professor meant this)

In one of our learned journals, a University of Tennessee colleague made up the following title in expertise and also his explanation of it: "Verbal and Overt Reactions of Men and Women to Unexpected Mild Nociceptive Stimulation." What the author actually did was to "stand on a street corner, jab every fiftieth passing pedestrian with a pin, measure how far he jumped, record whether he said 'Ouch' or 'Damn.' "

Lexicon for the Non-Thinker

Handy phrase guide for reference when one has nothing to say and is given twenty minutes to say it:

Reappraisal through an interdisciplinary framework
Personality correlates of decision-making
Orientating the staff to maximized objectives
Implementation of the developmental approach
Minimizing budgetary interpolations
Non-hierarchical factors in the environment
Systematic, on-going evaluation
Effecting a reduction in attrition
Oscillation of the mobility-stability ratio

Gobbledygook is even invading the commercial world. Barzun quotes a furniture dealer who capitalized on the snob appeal of pedantry with this piece of ad copy: "For full modern home living enjoyment let us accessorize you expertly from cellar to garret, as hundreds of our customers have approvedly done."

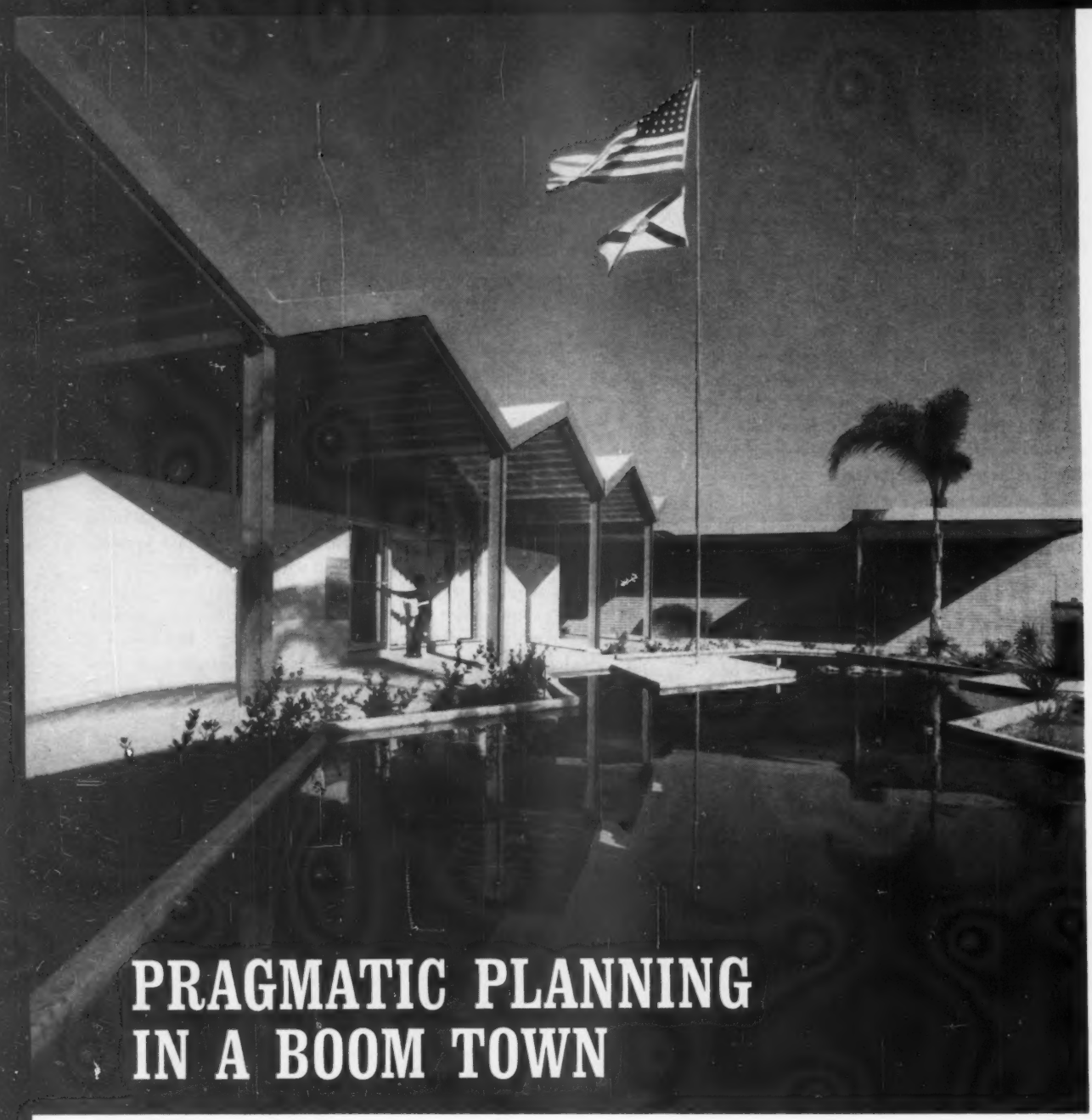
Why do learned people so readily fall victim to gobbledygook when it is clearly their duty not only to be intelligent but also to be intelligible, not only to discover but also to disseminate, not only to commune but also to communicate? There are several reasons I believe.

For one thing, the growing complexity of knowledge requires a very high degree of specialization, and communicating this knowledge requires highly-specialized knowledge unless one is to oversimplify his insight and discoveries. But I don't take issue with technical words; what I complain about are involved and fuzzy sentences and an unnecessary number of cliquish terms understood by similar specialists only. Even in our learned journals we should try to communicate with a fairly large number of scholars in allied fields in order to avoid *clannishness* and emphasize *community*. Alienation between groups breeds misunderstanding and resentment, and hence a haunting sense of intellectual isolation. Increasing specialization fosters this isolation, inevitably, and the growing addiction to gobbledygook compounds the problem. (Two biologists once came to me to complain that our biochemists do not speak the same language as other biologists and to suggest that we employ a molecular biologist. They also felt that our biochemists were so cut off from the physical scientists that we must look around for a biophysicist to bridge the gap.)

Most of us are increasingly hurried and behind and seem barely able to meet deadlines. We don't have—or at least don't take—the time to think thoroughly and clearly. Gobbledygook, which conceals unclear and incomplete thinking, is easier to write than English. Nobody can write clearly unless he thinks clearly, and nobody who thinks clearly at the time of composition writes muddily. People who use gobbledygook duck the responsibility for precision.

"Desire for status," says Professor Mills, "is one reason why academic men slip so readily into unintelligibility." Gobbledygook becomes a shorthand method of talking with members of the same secret order and so encourages the writer and the reader to feel that they are initiated into the same mysteries.

Scholarship is becoming more and more demanding at the same time that society is becoming more and more dependent upon it. Dr. Robert Oppenheimer has said that the gap between specialized knowledge and common knowldge is growing dangerously great. One way to lessen this danger is for scholars to be concerned about it and to use the dialect of general discourse as much as possible. If we keep on developing a private jargon we shall destroy our sense of large community even among the educated, become islands within a confusing sea, and revert to chaos—precisely the opposite effect intended by all the arts and sciences which aim at discovering and imposing order. ●



PRAGMATIC PLANNING IN A BOOM TOWN

Sarasota's decade of plant expansion has produced beautiful schools and a satisfied staff

BEFORE TRYING out even minor curriculum innovations on their pupils, a school system plans, tests, and reviews the change over a period of time. In building schools, unfortunately, time seldom permits such pragmatic planning. In fact, the speed of school construction can be remarkable to behold. Sometimes a bond issue is floated, the architect appointed, plans approved, bids advertised, the best bargain accepted, and the new building put up in almost half the time most banks allow for possession of a used car.

We can't turn back, as we can with a curriculum change, and redo a completed building on the basis of how it works when it's occupied. However, we can use past experience as a basis for planning future buildings. And this is precisely what we did during the past decade

in Sarasota County, Florida, when new school buildings were leap-frogging ahead of a booming population.

When our taxpayer public gave us the go-ahead for new schools with a multi-million dollar bond issue, architectural talent seemed plentiful enough but our school building experience was practically nil. Nevertheless, in fewer than four hundred work days we planned, put up, and occupied twelve and a half dozen classrooms, labs, music rooms, art rooms, shops, gyms, and lunchrooms.

This was only the beginning. Like the early days of marriage it took us a little time to get used to living together. We sent questionnaires to staff members in the new buildings and used their criticisms and suggestions in planning later buildings. All told, during our building decade we constructed, remodeled, or extended sixteen of the twenty schools in our county system. Staff comments and evaluations on these new buildings were immensely helpful during our planning sessions and we report them here for the edification of other systems about to launch expansions of their own.

Comments on adequacy of facilities

Elementary teachers replied that the 1,000-square-foot classrooms with adjacent patios allow sufficient space for simultaneous activities and for work groups that don't interfere with quiet groups. They also liked the adaptability of movable storage units.

Secondary teachers liked the size, shape, ventilation, and lighting of their rooms and the amount of built-in storage space. English and social studies teachers recommended more bulletin boards and chalkboards.

This report was prepared by the administrative staff of Sarasota County, Florida, Schools.

Left: Sarasota's Booker Elementary School (Ralph and William Zimmerman, architects) opens its front door to a lily pond. Above: Sarasota High School (Paul Rudolph, architect) has protective sun hoods on its southern windows.

Librarians felt that heavy student and class use of libraries required more room for vertical files and for storing audio-visual and other materials.

Comments on flexibility

Elementary teachers liked the sliding glass doors that open onto large outdoor patios and the folding partitions that extend rooms from 750 to 3,000 square feet.

Secondary teachers praised the flexibility of square classrooms. Sun control to relieve glare on chalkboards was also pronounced a success. Inflexibility was noted in the lack of adequate dark-out provisions for audio-visual equipment.

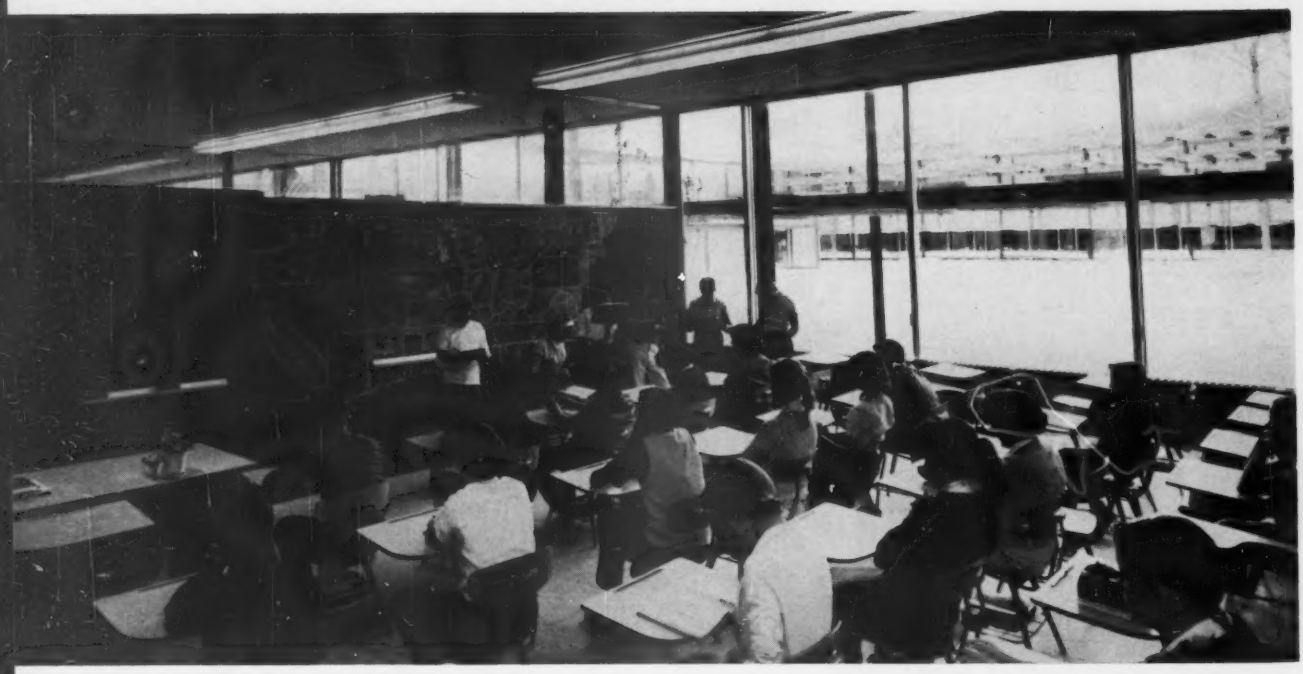
Suggestions for better interiors

Elementary teachers suggest more movable partitions for greater room flexibility. Air conditioning is recommended for more efficient teaching and more extended use of schools. One ingenious suggestion was that classroom floors be inlaid with maps, rules, and games.

Secondary teachers added recommendations for more conference rooms, larger materials centers, listening rooms in libraries, display cases for student projects, and more careful planning of student traffic patterns.

Suggestions for better grounds

Teachers recommended covered walkways that are low and wide enough for two-way traffic, paved areas



Above: Social studies classroom in Riverview High School (Paul Rudolph) followed teacher recommendations for lots of blackboard space. Below: Alta Vista Elementary School (Victor Lundy, architect) has sliding glass panels that open onto outdoor teaching areas—a teacher-sanctioned arrangement.

and pupil-loading zones located away from offices and fronts of buildings, separate bus and parent pick-up areas, plenty of large shade trees, playground equipment located away from classrooms, and covered play areas in elementary schools.

Service and maintenance factors

Administrators registered reactions to those service and maintenance problems that required attention after new schools were in use. Recommendations were made that pipe lines be more accessible and that service lines be located on the ground floor for easy reach by maintenance crews.

Communication and clock systems should be controlled by the school office and installed as part of the general contract. Costly (and required) fire alarm systems are questioned for one-story buildings where each classroom has a sliding glass wall and two exits.

Lunchroom kitchens should be ventilated and designed to be closed off from dining rooms so that these areas can be put to other uses during the balance of the day.

Open courts should be part of the master drainage system. Scuppers on buildings should be replaced by interior drainage. Sidewalks should be given a non-skid finish.

Terrazzo floors are suggested for most classrooms. Vinyl flooring and carpeting are acknowledged as superior for kindergartens, primary rooms, libraries, and learning laboratories where they establish a mood and cushion noise. Based on insurance costs, fire hazards, and wearing quality in the gulf climate, it is advised that concrete replace wood decking. All exposed wood should be treated for moisture and termites.

AT A THREE-DAY conference last August, sixty local school people, board members, and architects studied our potential for future team planning of new schools. The ideas that came out of this conference will aid our future plant expansion and may serve similarly for other school districts. We share them willingly:

Architect-centered

1. Avoid "crash" programs by allowing adequate time to study preliminary and final plans.

Photos by Phillip H. Hiss

Englewood Elementary School (West and Waters, architects) has folding partitions between classrooms to open area into one vast space; teachers found favor with this flexibility.

2. The educational aims of teachers and the teacher-pupil ratios in the buildings are basic information needed by the architect.

3. Large group meetings of teachers and the architect should be directed toward the broad scope of school planning. Small meetings of selected teachers and the architect should be held for deciding on details.

4. Architects should become familiar with the aspects of schedule-making and the traffic patterns of pupils.

5. Architects should provide scale models of their plans so that public questions may be answered prior to construction.

Teacher-centered

1. It is preposterous to expect an architect to create a functional school out of his dreams alone.

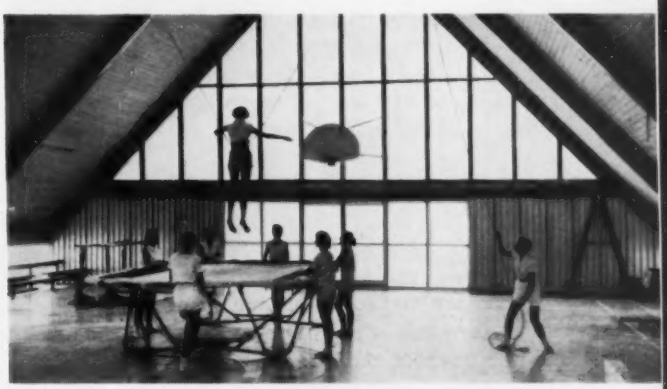
2. Teachers are usually qualified to explain their room needs but are rarely qualified to design a room.

3. When subject-matter specialists assist in planning, their recommendations should take into account room specifications which will accommodate subjects other than their own.

4. Consider non-teaching spaces in a school as components of learning: spaces for gathering and for being alone; spaces for gaining knowledge and for applying wisdom; spaces for creating and for observing; spaces for listening and for acting.

5. Consider space, sound, light, color, and comfort as accessories in stimulating the proper mood.

To school administrators we recommend: do not underrate your teachers and do not overrate your architect. To teachers we recommend: do not underrate your architect and do not overrate yourselves. ●



Steep pitched roof also forms the side walls of Brookside Junior High School gymnasium (Ralph and William Zimmerman).

Brookside Junior High School library reflects librarians' prior suggestions for more room for display and storage.

Norman Dello Joio on Music

Education for Creativity / Fourth of Four Conversations

Norman Dello Joio, son of a musical family, was born in New York. He studied music at Juilliard and Yale School of Music and won recognition as a composer while still in his 20's. Many of his operas and works for ballet, chorus, and orchestra are now part of the standard repertory. He received the Pulitzer prize for music in 1957 and this year was elected to the National Institute of Arts and Letters. He has taught at Sarah Lawrence College and teaches composition at the Mannes College of Music in New York.

A SCHOOL OR college may have the most beguiling kind of music education program—on paper—but its merits can be judged only in terms of results. And the results depend solely on the people teaching there. Good musicians are turned out where there is a good man teaching or heading a department. Where there are second-rate teachers, there is also second-rate music.

I've come across good music programs where I've least expected them. I've also gone to places which were supposed to have fine programs and I've found nothing. Reputation and money are no guarantees of good music. I've observed conservatory training where students are learning technique in a sterile fashion, unaware of music's ethical content. These students aren't very interesting as *people,* let alone as musicians. I have seen schools in the Middle West spend tons of money on equipment and facilities but have no direction or purpose behind them. One place bought a $2,000 musical typewriter which nobody knows how to use. And then I've gone into the backwaters of Alabama to meet an unknown choral conductor doing wonderful things with country kids. It's always the individual teacher, not the system, who is responsible for the quality of music education.

I have been heartened to find a large proportion of young people who are genuinely concerned with music. I've had students who are caught up in the serious problems in music and culture—students who see the arts whole and aren't just concerned with getting on Mr. Hurok's list of concert artists.

Some people think they have to be in New York to get a good music education. True, New York has the advantage of creative ferment, but a student can get a second-rate music education here as well. Recently one of the city colleges had an opening for a composition teacher. They asked everyone of distinction to fill the post, but they had to settle for a second-rater. Why? Because they demanded that the teaching assignment be full time. No first-rate composer would submit to that and deprive himself of time to compose.

This system of paying an artist-teacher on the basis of the number of teaching hours he can cram in is keeping schools from getting creative people on their staffs.

A musician who is kept busy teaching will never be able to develop into a first-rate composer. If he's well enough established, he doesn't need a heavy teaching load to support his family. The result is you get second-rate people carrying full teaching schedules and the students are the losers. . . .

One of the most promising developments for both students and composers is the Ford Foundation's young composers' project. It places promising but unestablished composers in school systems to write original pieces for student orchestra, band, and chorus. I've been working with the foundation on this project. Some of the schools that started with us two years ago are so happy with the results that, instead of relying on more Ford money, they've gone ahead and incorporated this program into their regular school budget.

This is one of the most successful music projects Ford has begun. It's ideal for the composer; he can devote his full time to composing, which is what he *wants* to do and is *trained* to do, and he can see it performed—which is a marvelous thing for any composer. I certainly would

have welcomed this opportunity when I came out of the conservatory. There were few creative jobs for the young composer then, just arranging or commercial hack work. For the youngsters it is a marvelous experience because they not only *see* the whole creative process, they become *part* of it. This is music composed for a purpose—Christmas program, graduation processional, school pageant, choral festival—and the composer is right there to take on rehearsals to get what he wants. The quality of material is far higher, too, than the standard "high school level" band or orchestra literature. Also, there's never the problem of a piece being too "modern." Youngsters will try anything. Their being close to its creation must account for this. . . .

I'm not very keen on the idea of federal support of the arts. I feel very strongly that people must be responsible locally for solving the arts problem. I think most communities have the ability to make their own choices; they don't need someone coming down from Washington to tell them how.

I'm dubious of a direct government role for another reason: people of questionable taste might get involved. I remember when President Eisenhower set up an advisory board for the arts center in Washington. That board was a scandal as far as the culture of the country is concerned. Band leaders with the lowest popular taste were named to it. My heart sinks at the idea of people like that heading up a government program and wielding wide influence.

I think foundation support is preferable because it is handled by people who have the vision to see the problem whole and who are able to draw up impartial and imaginative programs. Foundations are interested in decentralizing the arts from the big cities and in getting local people involved to the point where they contribute their own money and effort. To me, this is a better answer than just appropriating a lot of federal money. . . .

Education can build a receptivity to the creative arts. Its job is not to turn out artists—no educational system ever devised could do that—but rather to develop a climate in which the creative arts are cherished and can flourish.

When I taught composition at Sarah Lawrence, I had students who had no intention of becoming composers. They were girls from well-born families. It was valuable for them to acquire creative insight not just to increase their listening enjoyment but because they would follow their mothers onto orchestra and museum and opera boards. Someday they would control a community's artistic fare.

Atmosphere—at home or in school—has a great deal to do with a person's attitude toward the arts. I have three youngsters and they all came to music naturally. They were never forced to listen to anything, though the home atmosphere naturally had a lot to do with it. I took my daughter to her first opera at the Metropolitan when she was five; it was Wagner and you can't think of anything less appealing to children. But she wouldn't budge from her seat when I left to do the intermission broadcast for fear she would miss something.

There's no magic formula for enjoying music and no special age to start. It begins when a youngster can put a record on by himself. It doesn't matter what the music is—Mozart, Beethoven, Stravinsky. Children are not predisposed against any period; they'll listen to anything. And I think this is precisely the challenge to educators: the open-minded, unbiased enthusiasm of young people. What can't you do with raw material like that!

MAINTENANCE

Lower-Cost, Higher-Voltage Electrical System

WHEN THE Harry B. Thompson Junior High School opens next month in Syosset, it will usher into Long Island a new concept in electrical distribution for schools—one that reflects almost a 20 percent saving over normal electrical construction costs.

The new system is not a product of startlingly new components and equipment. Rather, it is an entirely new approach that uses higher voltages and combines existing materials and equipment with age-old axioms of electrical engineering. It was designed by our consulting engineering firm and results from unusual coordination between the architects, engineers, and a committee of Syosset technicians.

For many years, normal electrical service to schools introduced no more than 230 volts for use on heavy motors and heating and cooking equipment. For everything else, 120 volts was used.

Meanwhile, equipment and devices using electrical power, such as integral horsepower motors and fluorescent lighting equipment, have long been available for use on the high secondary voltage systems. These are fully accepted for use in commercial and industrial structures, particularly for the nominal 277/480-volt, 3-phase, 4-wire service available from most electric power companies. The cost of such equipment and devices has never differed much from that of their lower voltage equivalents.

Since all general-use wires and cables are not manufactured with less than 600 volts insulation rating, it becomes relatively easy to understand why economics are often available in making the greatest use of this minimum rating.

Divested of any complicating factors, one of the fundamental laws of electrical engineering is that the amount of electric power needed to operate a light, motor, or other piece of equipment is equal to the voltage times the current. It is expressed by this equation: $P = E \times I$. "P" is watts expended, "E" is the pressure in volts, and "I" is the current in amperes.

The value of "I" determines the size of wire needed; the more amps the bigger the wire. Therefore, it is logical that if a system uses higher voltages, but stays below the minimum 600-volt insulation rating, it would require less amperage. Savings could then be achieved by specifying smaller wire, and in turn smaller raceway, conduit, etc., to serve equipment having the same power consumption requirements.

In line with this reasoning, the Syosset committee of technicians presented their ideas on the new design concept to Eggers & Higgins, Architects, and to our firm. After considerable study, we found it not only feasible, but highly economical as well. Accordingly, we designed the system for the nominal 277/480-volt secondary service (255/440 actual) offered by the Long Island Lighting Co.

The service voltage is fed directly to fluorescent lighting and to heavy motors used for school operational purposes. It is transformed down to individual 120/208-volt systems in each wing of the building so that 120 volts will be available for plug-in receptacles, small appliances, and whatever incandescent lighting is used. The 208 volts, rather than full 440, is available for equipment in the industrial arts shop. This equipment is handled directly by students and is too heavy to utilize 120 volts.

Savings realized by using secondary high-voltage went beyond those of wire and conduit to other components of the electrical system. I could cite as an example the main switchboard we designed for the school. Although the use of higher voltage increased the cost due to certain aspects related to voltage insulation, the lower current which the switchboard has to handle permitted an overall saving of approximately $4,500.

When electricity is carried long distances, there is resistance to its travel which lowers the voltage. This, in turn, is often the cause of improper functioning of the equipment supplied, even though most items of electrical equipment are rated to operate efficiently in spite of a small loss of voltage.

Voltage drop causes malfunctioning of equipment, in most cases, to the extent that it exceeds a certain percentile of the voltage rating of the equipment, and not on the basis that it exceeds any absolute value. For instance, if a motor is rated for 208-volt service and there is a line loss of 20 volts, the voltage drop is almost 10 percent of the motor's rating which might cause it to function improperly or inefficiently. Using a motor rated for 480 volts, the same 20-volt drop represents a loss of only about 4 percent which is not likely to impede its operation.

We were able to achieve additional economies because of the design of the Syosset school. Its campus plan permitted us to run main distribution wiring in shallow trenches in leveling fill below the concrete slabs. In this way, we could lay out the conduit "as the crow flies," not limited by the shape and location of walls or

By Mark Eitingon, director of Cosentini Associates' electrical department. Cosentini is a consulting engineering firm well-versed in educational buildings from elementary schools to the University of Chicago.

rooms. We could also eliminate many pipe hangers and other supporting devices and lessen conflict with the pipes and ducts installed by non-electric trades.

Realizing that no two schools are alike with respect to electrical requirements, our engineering firm draws up a fully-detailed "design procedure" at the outset of an engineering design commission. It includes a study of present and proposed program, architectural layout, and site and an analysis of lighting, power, fire alarm, and communications systems.

An elementary school has a precise program with few changes. Programming is seldom needed, so a simple clock system will often suffice, with a bell system for communication.

Junior and senior high schools, however, are quite another matter. Their programs are subject to constant change, and the electrical system must not only be able to supply the needs of every one of today's functions, but must also be able to adapt to future changes.

Today's junior high might have any combination of shops, cafeteria, general science rooms, physics and botany labs, gymnasium, music rooms, home economic areas, and an auditorium complete with complex stage lighting and sound systems. A high school physics lab, for example, requires constant AC and DC power as well as variable AC and DC. A master clock system might have as many as six individual programs for different courses, each operating independently of the others and each subject to change as conditions require.

Another phase of the overall engineering program is instruction and demonstration of the use of components and units for instructors and maintenance personnel. A brochure explains the mechanical and electrical systems with charts, graphs, lubrication schedules, and valve and switch identification. Teachers are given instruction on flexibilty and functioning of equipment. On a room speaker, for instance, they are shown how to use the "call-back" feature and the private "low-level conversation" feature. ●

Circle **OV-221** on reply card, last page

This is for the Birds!

MICHAELS DISPLAY **CASES**

are Custom-built to any need

Michaels Time-Tight cases meet every requirement for enhancement of contents and full protection against dirt, handling, theft and vermin. This Audubon case is a good example. The line is complete: table and wall cases, corner and aisle, suspended and recessed types. All models include Michaels' own innerlocking frames, mitered intersections, and screws hidden except on access panels. First choice of hundreds of schools, universities, museums, libraries, science laboratories and business houses. The reasons for this leadership you'll find in our new catalog with descriptions, specifications, and illustrations. Send for it.

CONTROL PARKING *with* **MI-CO METERS**

Give everybody a turn, and make you a profit. Adjustable to any coins and number of hours. Operable all weather. Get details.

A Symbol of High Quality

M ABC

THE MICHAELS ART BRONZE COMPANY

P. O. BOX 668-0, COVINGTON, KENTUCKY

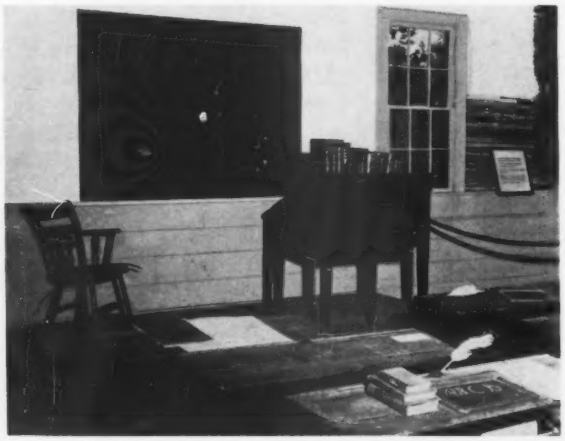
General Offices and Plant, Erlanger, Kentucky

OTHER MICHAELS PRODUCTS: Architectural Metal • Curtain Walls • Reversible Windows • Bronze and Aluminum Plaques and Memorials • Parking Meters

The grass grows tall around this one-room school in Pennsylvania farm land.

Yesterday's Schoolhouse

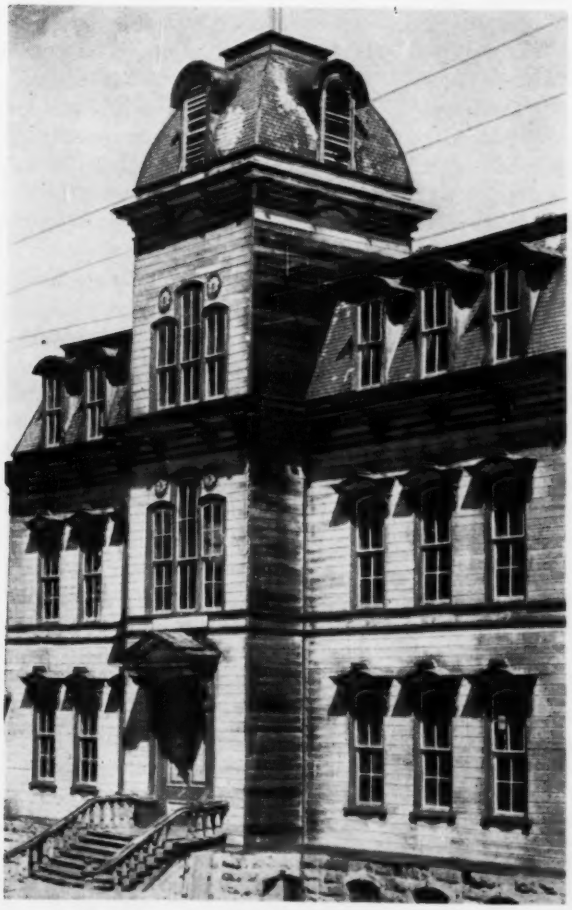
THESE SCHOOLS which once rang with the laughter of children and the rasp of chalk on their slate tablets now stand silent and deserted. Nassau's Little Brown School has been restored as a museum and furnished with authentic items like quill pens, a maple bucket with hand-carved dipper, and copies of Goodrich's *School Geography* and Daboll's *Arithmetic*. Junior historians in Northumberland County are raising money to restore the Little Octagonal School. The Victorian majesty of the Fourth Ward School has not been erased by time though it needs paint and repairs; Nevadans hope to preserve the school and open it to visitors. (Pictures and description of the Pennsylvania schools by Barbara Schockley, assistant professor at Bloomsburg State College; of the Nassau school by Arthur Delaney, instructor at New Hyde Park, N. Y., Memorial H. S.; and of the Nevada school by Samuel Kermoian, principal of Farragut and Jose Ortega schools in San Francisco. ●



Shake-sided Little Brown School in the Valley, built in 1826 in Long Island's Nassau County, has been renovated and authentically furnished as a museum.

Little Octagonal School on Highway 45 in Pennsylvania was built in 1814 of native limestone. Eight-sided plan was to afford protection against Indians.

Fourth Ward School in Virginia City, Nevada, built in 1876 with solid oak doors and maple-paneled interiors, was called "one of our most modern schools."



RUGGED BULWARK CONSTRUCTION

Ward's mighty "skeleton of steel" provides the strongest, most durable structure on wheels. This investment in safety is assured through advanced Bulwark construction . . . an engineering concept combining one-piece bow construction with road-rigid electro-welded floor assembly construction. The result is massive strength. The entire bus body is virtually a single fortress-like structure.

Drop the attached coupon in the mail for complete, illustrated details.

WARD BODY WORKS, INC.
Conway, Arkansas
Austin, Texas

Ward Body Works, Inc.
P. O. Box 311
Conway, Arkansas

Please send me your 1961 catalog illustrating the features which have made Ward the "New Standard of Safety, Performance and Economy."

NAME_____
TITLE_____
ADDRESS_____
CITY_____ STATE_____

Circle **OV-223** on reply card, last page

UNGUARDED KEYS!

AN OPEN INVITATION TO THEFT! VANDALISM!

Today's high cost of school property, equipment, and supplies, represents an *investment that must be protected!*

You get that protection with TELKEE—the modern key control system designed for *complete security plus convenience!* TELKEE files your keys—making them accessible to authorized personnel only!

TELKEE indexes your keys—making them accessible fast—without wasting time to look for them!

Used by schools and institutions of all types and sizes, there's a TELKEE system just right for your requirements!

FREE illustrated booklet. For complete information, write:

P. O. MOORE, INC.
A Subsidiary of SUNROC Corporation
TELKEE The MOORE KEY CONTROL System
GLEN RIDDLE 87, PENNSYLVANIA

Circle **OV-224** on reply card, last page

gracefold

THE FINEST FOLDING TABLE

STANDARD MODEL

- Choice of four laminated plastic tops
- Plastic T Moulding protects against abuse
- Exclusive Safety Lock Insures Stability
- One person sets up or breaks down easily with one arm
- Exclusively styled Double Tapered Legs
- Self-Leveling Leg Tips
- Exclusive Bonderized Finish on metal

McNeff Industries, Inc.
Box 10626, Dallas, Texas

Please send the colorful illustrated **gracefold** catalog containing complete details.

FREE write today for **gracefold** catalog

NAME_____

POSITION_____

ADDRESS_____

CITY_____ STATE_____

The Lunch Schoolroom

SCHOOL FOOD service facilities in the United States serve approximately the same number of meals daily—2¼ million—as the hotel industry. Today more than 60,000 schools have food service units that were built at an average cost of $20,000. This represents an increase of about 150 percent over the number of units in operation fourteen years ago.

Expansion of school food service facilities has been caused by pressures from several powerful influences. *First,* more children are transported more miles to more schools with every passing year, and this is expected to be the pattern for years to come. *Second,* with school officials trying to squeeze full use out of crowded facilities, school lunch periods have had to be operated on split-second schedules. (The days are long past when a student could open his lunch pail under a weeping willow tree on school grounds and, after finishing Mom's home-made apple pie, catch frogs in a nearby marsh.) *Third,* there has been such a rise in the female work force that today in nearly half of the American families, the mother is not at home to prepare lunch. *Fourth,* and most important, is the gradual transference of many functions of every-day life from the home to the school. Though food service administrators are now mainly concerned with noon meals, they frequently wonder—and shudder a bit at the thought—how long it will be before they will have to serve breakfast to students. This trend is an indication that the institution of family dining is declining. Certainly this is not a development that food service administrators have encouraged, but there is little they can do to forestall it.

Therefore, it appears that change in America's living patterns is the main force behind the rapid growth of food services in our schools. This service has become not only accepted but demanded in mid-twentieth century schools; it has become a permanent part of school organization.

But forward-thinking food service administrators are not satisfied to accept school lunch programs as merely a convenience for their students. They believe that any substantial part of school plant activity, involving most or all students, can also be educational. This means an opportunity to teach children how and what to eat: the foods that make up a good daily diet; the effect of nutrition on health; and diseases caused by bad eating habits. A thorough knowledge of food, with special emphasis on nutrition, is a practical lesson that children can readily be taught as part of a comprehensive education process. And with the decline in home dining, good table manners can also be inculcated.

If food service installations are to realize their full potential as a part of the education process, their directors must be ingenious in using them as teaching devices. This would bring about a transition of school lunchrooms to lunch schoolrooms. Eating stations or learning stations—that is the question. Provision must be made to promote the spread of the educational process into every aspect of school life as well as to insure sound business practices. Many food service administrators have the talent, imagination, and resources to make their operations important adjuncts to formal education. But the ultimate success of their efforts to make the food service program an educational device depends upon the active support of teachers, principals, and superintendents. ●

By John Perryman, executive director of the American School Food Service Association; he was a featured speaker at the last convention of the Association of School Business Officials.

EXECUTIVE'S BOOKSHELF

EDUCATION AND INCOME—
Inequalities in Our Public Schools

By Patricia Cayo Sexton. New York: The Viking Press. 298 pp. $6.

Most of us are proud of our great experiment in free and universal education. But until we recognize what is blocking us from realizing the dream of equal educational opportunity for all, we shall make little further progress. We may even slip backward as we leap for some of the bandwagons of ability grouping, merit scholarships, programs for the gifted, and other stern proposals for a tougher curriculum. In Professor Sexton's book we'll find nothing to assure us that these are the vehicles on which we can ride to the promised land.

Big City is the object of Mrs. Sexton's study. It is easily recognizable, but she is wise to maintain the fiction of anonymity. The device of disguised identity makes it harder for the rest of us to take refuge by pointing the finger at one place where the facts are steadily being turned up and faced.

What facts she does pile up! There is no precedent for the scope and coverage she gives her study. Whether you feel that there is bias on the author's part, or that statistics are pretty meaningless (and too dull), or that one city doesn't really mean much, you owe it to yourself to read this. But be prepared for an amazing, nearly frightening consistency in what the tables reveal. However you measure success or opportunity, you'll find that she has covered the point with her study.

Differ as you may with her conclusions, the facts show beyond dispute that public provisions of such things as qualified teachers, adequate teaching resources, school facilities, and almost every measure from health to delinquency are all closely related to the family income: the lower the income group, the poorer the provisions. If you can put down this book without a new realization of how unequal our children's chances are, you haven't really paid attention.

SOVIET LEADERS & MASTERY OVER MAN

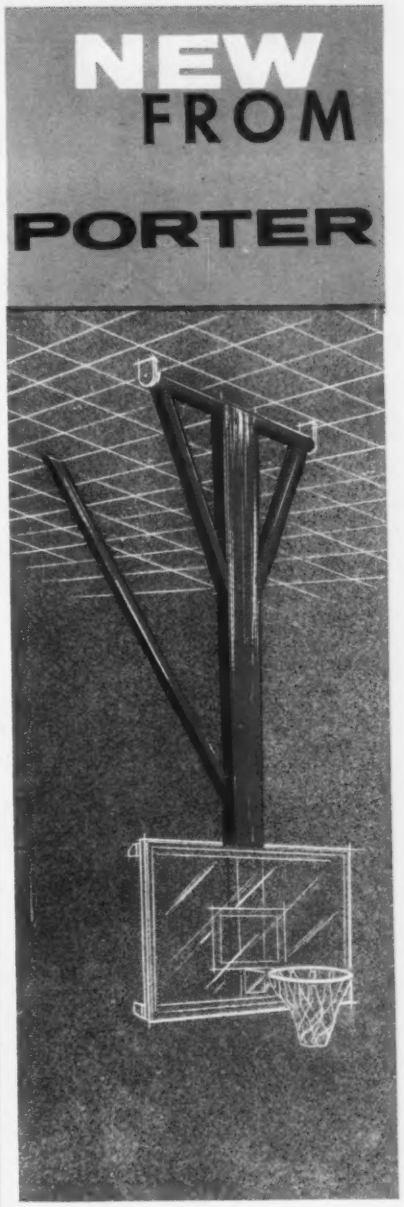
By Hadley Cantril. New Brunswick, N.J.: Rutgers University Press. 173 pp. $1.65.

How do Soviet leaders perceive man? What difference does it make? If in our own view the whole set of arrangements under which Soviet citizens live is just plain anti-human nature, does this mean the Soviet system is bound to collapse?

Under the aegis of the Institute of International Social Research, Mr. Cantril has made an exhaustive study of the assumptions, both implied and expressed, on which the Soviet system rests. But his analysis is by no means exhausting to the reader.

The jacket calls it a "chillingly dispassionate analysis." The chill comes from the realization that the whole system rests on assumptions about the nature of man which present an altogether different picture from our own. As Cantril says, we simply cannot afford to act as though our own concept is unchallengeable truth, the Russian is wholly false.

Educators in this country are aware of the Russian insistence that individual differences are unimportant and can be eradicated by group correction and sound teaching. It puzzles and distresses us and outrages our painfully acquired psychological insights. Yet to an amazing degree it seems to work. So with the one-party system, the work-assignment, the



NEW "LINE 100"

Now — clean, functional basketball backstop design . . . rigid construction . . . dependable remote operation. And it's from Porter . . . over 150,000 backstop installations . . . 50 years of experience in making backstops. For complete information on Porter's New 100 Line, our Deluxe 200 Line and new Economy 300 line, write today for new Basketball Catalog.

PORTER
ATHLETIC EQUIPMENT COMPANY
9555 IRVING PARK ROAD
SCHILLER PARK 8, ILLINOIS

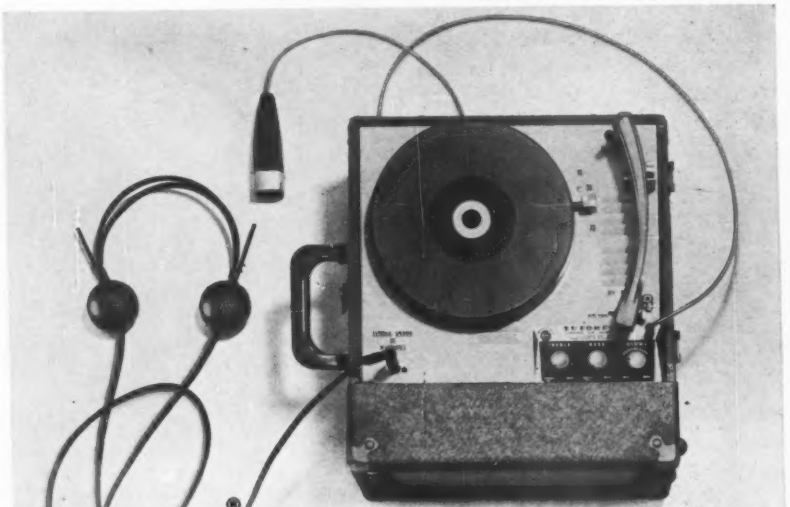
Circle OV-226 on reply card, last page

Here's a dual formula powder that removes stains, burnt-on food, oxidation from stainless steel and copper. Cleans better than cream, without scratching, and polishes, too—at a much lower cost. Convenient 19-oz. shaker can. A full line of Babbitt products is available through your sanitary jobber.

If it needs cleaning ...it needs Babbitt

B. T. BABBITT, INC. • INSTITUTIONAL DIVISION • 625 MADISON AVENUE, NEW YORK 22, N. Y.

Circle OV-227 on reply card, last page



TUTORETTE® is a true audio-active language lab, plus a classroom record player and P.A. system with 12 watt transformer-powered amplifier and 9" dual cone speaker. With Tutorette accelerated techniques are practical in both cost and operation.

ATC 300L $69.50 net. $104.25 list. Optional mike and headset $15.92 net

$6950

ATC 300VL with variable speed turntable and illuminated strobe. $84.50 net. $126.75 list.

SEE YOUR AUDIOTRONICS DEALER OR WRITE FOR COMPLETE CATALOG

AUDIOTRONICS

11057 WEDDINGTON STREET, NORTH HOLLYWOOD, CALIFORNIA

Bookshelf (continued)

papa-knows-best, and scores of other arrangements of Soviet society. But the persistent and growing strength of the Soviet society makes it imperative that we somehow understand—that we perceive through Russian eyes.

We're indebted to Mr. Cantril for this valuable study and to the publishers for an extensive but sturdy book which is easy on the eyes *and* the purse.

TEACH WITH TELEVISION

By L. Costello and G. N. Gordon. New York: Hastings House Publishers, Inc. 192 pp. $5.50.

It really is not important what your prejudices are about television and teaching, so far as much of this book is concerned. Basically the authors start with an assumption that television is another communications medium which has already proven valuable in education. But their exposition in Chapters 1 and 2 of the uses and limits of television is fair and informed.

The book goes on to report the problems of installation and use from the viewpoint of the user, giving practical advice based on experience. In fact they have succeeded well in writing for the TV teacher and the administrator of a TV teaching program. They lay particular emphasis on the closed-circuit systems which they believe hold the most practical possibilities for the larger number of schools and colleges.

Those educators who are working in the field, or planning to enter it, will appreciate the practical approach.

A COMMITMENT TO YOUTH

Edited by Abraham S. Goodhartz. New York: Bookman Associates. 284 pp. $4.50.

This is the story of Brooklyn College's student personnel program—its birth, its development, its philosophical foundations, and most importantly, its faculty involvement and support.

Mr. Goodhartz is not writing a

prescription. Over and over he refers to the unique problems of a non-residential large city college of 8,000 full-time and 9,000 part-time students. Yet the value of the book is not just as a case history, engrossing though that may be. Neither is it in the possible transplanting of specific parts of the program, although this is more promising than is so modestly represented. Any faculty of a liberal arts college or university could profitably study the list of college goals developed by the Faculty Committee on Long-Term Curriculum Study. The principles which guide the counseling program were developed by the Faculty Council and are worth study in themselves. But most of all the whole interweaving of the teaching and counseling faculties and processes uniquely guarantees the healthy relation of counseling to education and the minimum of friction between faculty and counselors.

President Gideonse is obviously the chief source of the original impulse, and a chief nourisher of the program as it develops. Yet here is a resolution of conflict and an agreement of aim among faculty members which make this report valuable.

THE PENGUIN DICTIONARY OF QUOTATIONS

J. M. and M. J. Cohen. Baltimore, Md.: Penguin Books, Inc. 664 pp. $2.95.

Don't throw out your Bartlett, nor even less your Oxford Dictionary of Quotations. But add this, for its real ease of reference (234 pages of index to 430 pages of quotations), its freshness (numbers of current and quotable figures are here), and its pocketbook size with durable cover and binding.

Independent Activities for Creative Learning

By Helen Fisher Darrow and R. Van Allen. Practical Suggestions for Teaching No. 21. New York: Bureau of Publications, Teachers College, Columbia University. 110 pp. $1.25.

A practical, helpful book for the elementary classroom teacher, principal, and supervisor, soundly based and specific in its suggestions.

Teacher Education Direction for the Sixties

The American Association of Colleges for Teacher Education, 1201 16th St. NW, Washington, D. C. 102 pp. $2.50.

For those who did not attend the 1960 School for Executives sponsored by the AACTE at Bemidji—and those who did—this collection of the nine significant working papers represents some of the best thinking on the subject of teacher education.

Improvement of Rural Life—The Role of the Community School Throughout the World

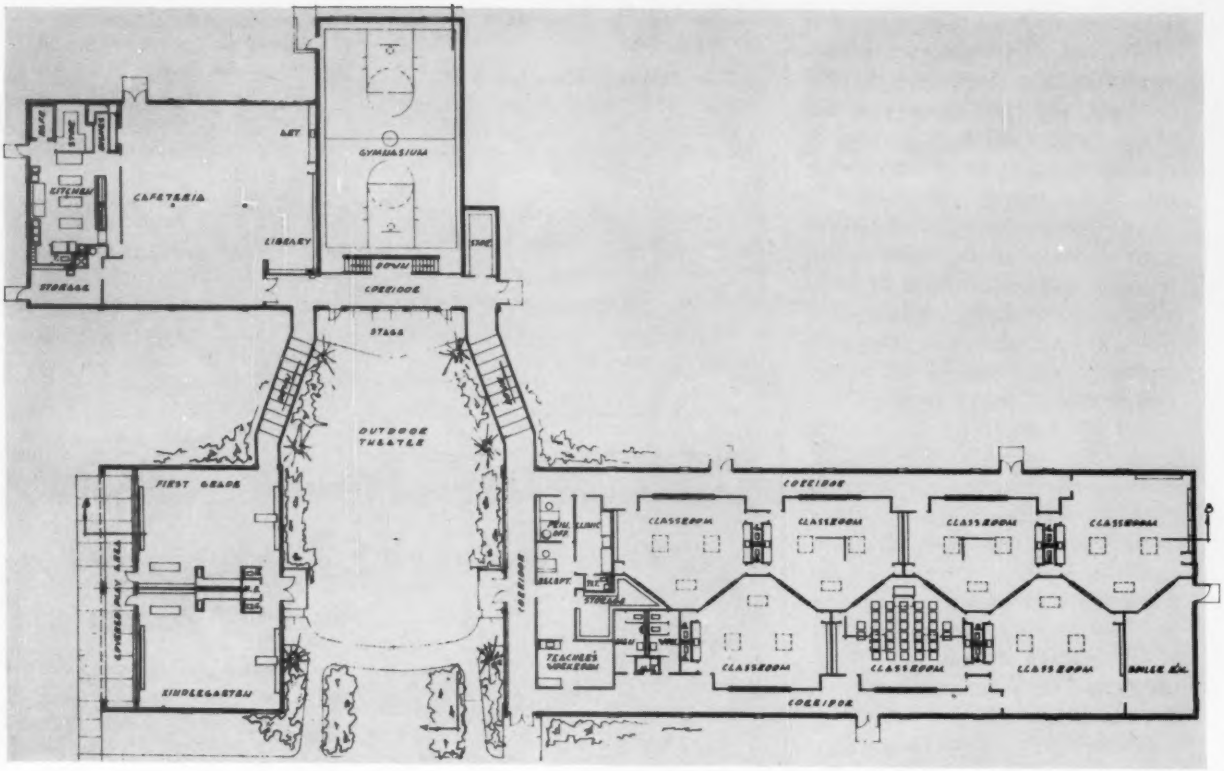
Dept. of Rural Education, National Education Assn., 1201 16th St. NW, Washington 6, D. C. $1.50 (quantity discounts).

"Merit Rating" or Effective Personnel Policies

Edited by Virgil M. Rogers. Syracuse, N. Y.: Syracuse University Press, $1.75.

Circle OV-228 on reply card, last page

SAVE COSTS! SAVE MAINTENANCE! SAVE SPACE!
STANDARDIZE with Mitchell FOLD·O·LEG tables
Fill your every need for efficiency, comfort and economy from Mitchell's complete selection of quality-engineered tables, stands, risers and stages. Your Mitchell representative will be glad to show how you and your budget will be ahead. Send coupon for detailed information.
Table Trucks
Make your table moving easier, faster, better . . . and save time, labor, and money doing it.
PorTables
Get versatility and utility with Mitchell's smooth-sure action in this "Fold and Roll" table and bench set . . . at your finger-tip command.
UniTables
Reduce change-over time from minutes to moments with this ingenious Mitchell "Fold and Roll" table. Ruggedly constructed for maximum durability.
BANDSTAND AND STAGES
CHORAL STANDS
SEATING RISERS
WALL TYPE DOUBLER TABLES & BENCHES
MITCHELL MANUFACTURING COMPANY
2726 South 34th Street • Milwaukee 46, Wisconsin
Send illustrated brochure on Mitchell Products as indicated.
Mitchell Tables, Trucks
Mitchell UniTables
Mitchell PorTables
Mitchell Stands, Stages, Risers
Mitchell Doublers
Have Mitchell representative contact us.
NAME
TITLE
SCHOOL
ADDRESS
CITY
ZONE
STATE



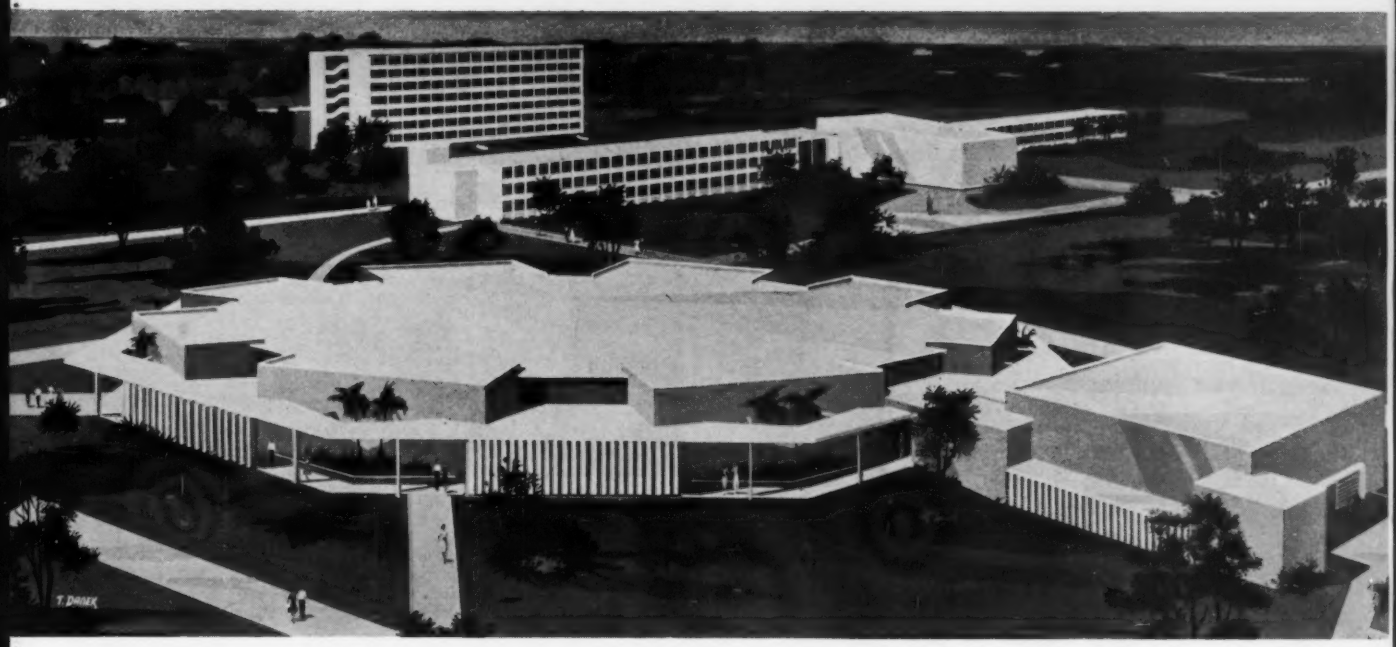
PLANT NEWS

Stair-Bridged School

Innovation is the design keynote of the Earle A. Johnson Elementary School in Jefferson County, Colorado. Six-sided classrooms are shaped like miniature theaters and are insulated from noise, glare, heat, and cold by exterior corridors. The sloping site dictated a two-level structure and multi-terraced playground.

The outdoor court is designed as an open-air theater with stage. Two stair bridges or finger corridors connect the classroom portion of the school with activity units—gym, library, and cafeteria. These bridges are constructed of special structural steel and have repetitive mountain peak shapes.

Each classroom has special corridor display areas, book storage, service sink, drinking fountain, work counter, cabinets, and toilet facilities. Off-white plastic covers the plaster walls and forms a continuous tackboard surface and projection area for visual aids. Associate architects of this $405,000 building are Stanley E. Morse of Denver and Caudill, Rowlett and Scott of Houston.



Octagonal Teaching Center

This octagon-shaped building, under construction at University of Miami, Coral Gables, Florida, will be used for teaching by television and other visual aids and by conventional lectures. Seven of the eight classrooms seat 304 students each, and the eighth subdivides into three smaller lecture rooms.

Square building at right houses television production studios from which programs are wired in closed circuits to the classrooms. All equipment in the building could be run automatically if desired.

Walls of the structure are concrete block in a reinforced concrete frame for hurricane resistance and economy. The outside is stucco painted with epoxy paint for maximum durability. Interiors are plastered and covered with vinyl fabric finish. Architect Robert Fitch Smith, FAIA, designed the building. Construction is estimated to cost $587,750.

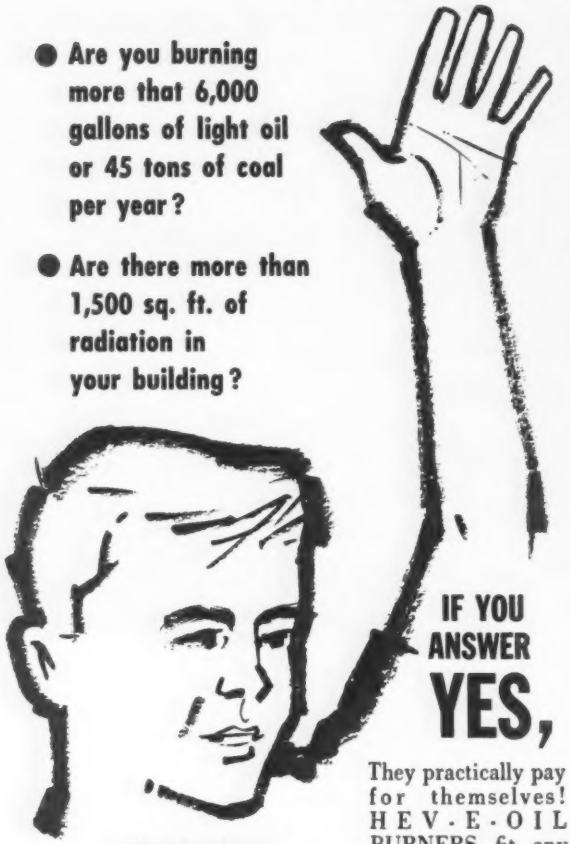
Modular Unity

Westbrook Junior High School, Omaha, Nebraska, (School District #66) has simple unity of form but is actually a complex place for learning for more than 800 students. Designed by the Leo A. Daly Company, architects, the plan has classrooms grouped about a central court. Modular planning houses all elements of the school, 81,224 square feet of area, under one unbroken roofline. Exterior materials of the steel frame structure are brick and a prefabricated steel window wall, with porcelain steel panels. Interior spaces are divided by brightly painted concrete block partitions. Construction cost: $996,564. ●

Walter S. Craig

Circle **OV-229** on reply card, last page

- **Are you burning more that 6,000 gallons of light oil or 45 tons of coal per year?**
- **Are there more than 1,500 sq. ft. of radiation in your building?**



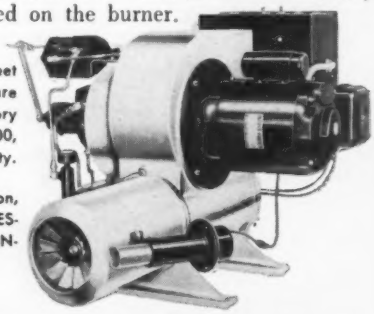
IF YOU ANSWER YES,

They practically pay for themselves! HEV-E-OIL BURNERS fit any boiler . . . use inexpensive heavy oils . . . and cut maintenance costs! You can put your savings into extra classrooms and equipment!

INVESTIGATE HEV-E-OIL BURNERS

Engineered to utilize low-cost No. 4, 5 and 6 oils with higher heat content . . . HEV-E-OIL BURNERS are available in 5 - 150 gph.

Each burner is a complete package, ready to install. It is factory-assembled, fully fire-tested and completely wired. Automatic electronic controls are connected, tested and mounted on the burner.



HEV-E-OIL BURNERS meet all code standards; are Underwriters' Laboratory approved . . . 720,000, 21,000,000 BTU capacity.

For complete information, write Dept. F-81. INVESTIGATE HEV-E-OIL BURNERS today!

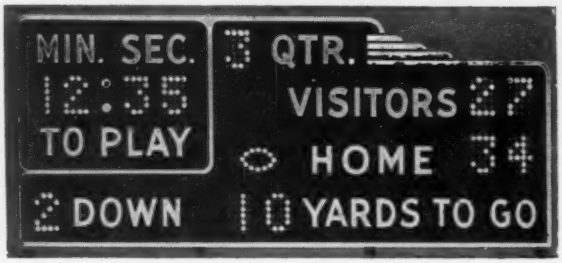
INDUSTRIAL COMBUSTION INC.
EXECUTIVE OFFICE:
4447 N. OAKLAND AVE.
MILWAUKEE 11, WIS.

Circle **OV-230** on reply card, last page

STILL TIME TO INSTALL A

Scoremaster

FOR THE 1961 FOOTBALL SEASON



Model 1250-2, today's most widely used board. Overall size, 8'4" x 18'4". 18" x 12" Numbergrams; 12" x 18" Symbols, 12" Lettering.

If you act at once you can modernize your stadium before the opening game with a modernly designed, precision engineered, colorful Scoremaster electric scoreboard and timer.

Provide your spectators with the best in fast, accurate, dependable scoring. Assure yourself of many years of troublefree, low-maintenance operation. BUT HURRY — BETTER CALL FOR COMPLETE INFORMATION TODAY.

THE M. D. BROWN COMPANY
2207 Lake St. MUtual 3-3100 Niles, Mich.
"When Split-Seconds Count, Count On Scoremaster"

Circle **OV-231** on reply card, last page

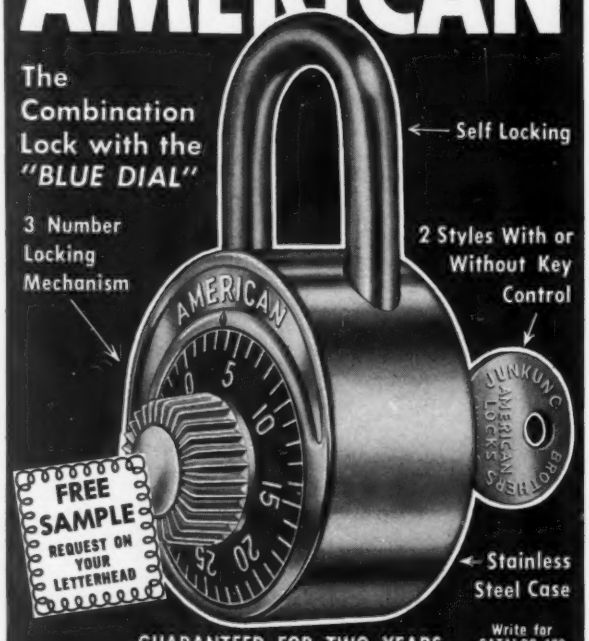
AMERICAN

The Combination Lock with the *"BLUE DIAL"*

← Self Locking

3 Number Locking Mechanism

2 Styles With or Without Key Control



FREE SAMPLE
REQUEST ON YOUR LETTERHEAD

← Stainless Steel Case

GUARANTEED FOR TWO YEARS

Write for CATALOG 100

JUNKUNC BROTHERS
AMERICAN LOCK COMPANY
4941 S. Racine, Chicago 9, Ill.

EDUCATION ROUNDUP

Public • Private • Military • Business • Labor • International

Waste Makers

Science materials purchased with National Defense Education Act funds for use in elementary schools are being wasted, according to Dr. L. Warren Nelson, Miami University education professor. He recently received a grant from the National Science Foundation to study the situation.

"Present lists of materials suggested for elementary science laboratory work are ineffective in getting materials into use in classrooms for a number of reasons," he said. "Teachers are unfamiliar with theory or practice of the experimental methods. Fearing it, they avoid experiments in science and frequently discourage children to experiment.

"Elementary teachers also frequently don't recognize a piece of equipment or its intended use when they see its name in a list of supplies."

In one above-average school system which invited a check of its laboratory equipment, Nelson found nineteen science kits that were left unpacked for more than two years because the teacher was not prepared to make use of them.

Mapping the Way

Geography is the latest section of the high school curriculum to come up for overhaul. The Association of American Geographers and National Council for Geographic Education will jointly develop a new course of study, test it in selected schools, and then produce it on film and video tape. The new course will emphasize concepts and skills rather than rote memorization. This marks the first time that researchers will join with practicing teachers to update geography.

Unlike planners of the new chemistry, physics, and math, the geographers are advocating change in teaching aids instead of change in textbooks and teacher training.

Gilbert White of the University of Chicago, co-chairman of the joint committee, said, "No leading nation of past ages has had, for its time, the geographic illiteracy of the United States today."

NEA: Seven Years Later

"Better late than never," was the way one delegate summed up the NEA's adoption of a resolution supporting the U. S. Supreme Court's 1954 school desegregation decision. Adoption of the resolution by the 5,000 delegates at the association's 99th annual convention in Atlantic City came only after hours of debate and some intricate parliamentary maneuvering.

The issue has been debated at every NEA convention since 1955 and each time failed to gain the necessary support. This year, proponents were hard at work lining up support from the moment the six-day convention opened. Opponents were equally busy: on the last day of the convention, rumors of race riots in northern cities were suddenly current.

The strategy of the proponents was to insert an amendment to a vague, generalized resolution on desegregation. The amendment would have requested the officers to "plan and initiate actions," that would "support the United States Supreme Court decision on desegregation of public schools." More than two dozen spoke in favor. Opposition views, surprisingly, came not so much from southern delegates but from northern delegates who feared that adoption would disrupt the NEA membership drive (one million by 1964). What turned out to be the key argument against the amendment was its wording. The delegates didn't want the NEA to "initiate" desegregation action, and when the vote finally came, the amendment failed by a narrow margin.

Fabian Bachrach

NEA's President Turner

Proponents quickly realigned their forces and then offered the amendment as part of a statement of principle. As finally, and overwhelmingly, passed, the amendment said, "The NEA pledges continued support of the U. S. Supreme Court's decision on desegregation." Only white southern delegations put their opposition on record; an equal number of Negro southern delegates went on record in support of the amendment. And "history" was made.

Earlier in the final business session, another desegregation issue threatened to disrupt the convention. A motion was offered calling for a committee to study a dispute between the Virginia Education Association and its affiliate, the Arlington Education Association.

The Arlington Association was found by the state group to have "automatically disaffiliated" itself last May by accepting Negro members in violation of the constitution and by-laws of the association.

The motion was carried by a roll call vote after unsuccessful efforts by southern delegates to block its adop-

Roundup (continued)

tion. The vote was 3,457 to 722.

Desegregation didn't cause the only fireworks. After considerable debate, delegates were unsuccessful in their attempts to remove a paragraph from the resolution on evaluation and subjective rating which included the statement: "Plans which require such subjective judgments (commonly known as merit rating) should be avoided."

Once again, the NEA avoided any specific mention of collective bargaining. A resolution on teacher-board relationships stated, "The seeking of consensus and mutual agreement on a professional basis would preclude the arbitrary exercise of unilateral authority by boards of education and the use of the strike by teachers as a means of enforcing economic demands." This resolution was toughened up somewhat by an amendment which said that when agreement could not be reached between teachers and a school board, the NEA recommends that a board of review made up of members of professional and lay organiations should be used in extreme situations.

(The day following the convention, the Honest Ballot Association reported that New York City teachers had voted four-to-one in favor of choosing a collective bargaining agent. The vote was regarded as a victory for the United Federation of Teachers, AFL-CIO, which made collective bargaining an issue prior to calling a one-day teacher strike, the city's first, on Nov. 7.)

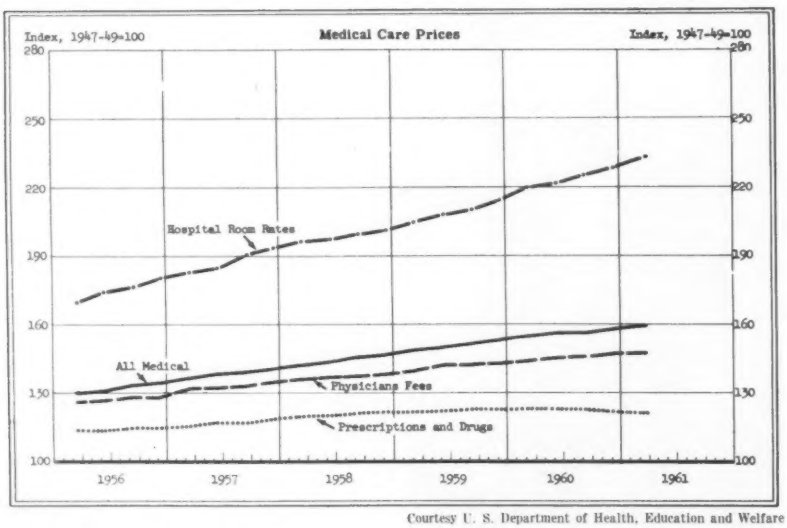
Altogether, the NEA delegates passed seventeen resolutions including federal support of education, greater consolidation of school districts, and reciprocal retirement benefits among states.

Mrs. Hazel Blanchard, an elementary school principal from Fresno, Calif. was elected first vice-president and president-elect. After a one-year term in her new office, Mrs. Blanchard will become head of the NEA at its 100th annual convention in Denver next year succeeding Ewald Turner of Pendleton, Ore., the new president.

Munificent Grads

Alumni are increasing their show of gratitude to their alma maters. The American Alumni Council reports that 690 colleges and universities in the U.S. last year received a total of $163,097,722 from 1,455,177 alumni. The average gift jumped from $31.93 the previous year to $34.67.

Snapshot of Medical Costs



Courtesy U. S. Department of Health, Education and Welfare

Index of medical care prices moved up 1 percent during the first quarter of this year to a record of 159.6. Institutions which provide health insurance for their staff or students can expect a further rise in premium costs.

Speedy Education

Nearly ten times as many high school students took advantage of Advanced Placement Programs last year as did four years ago, a measure of the growing acceptance APP is enjoying. U. S. Education Office reports 10,531 students in 890 high schools took college courses for credit, with the cooperation of 400 colleges and universities, during 1959–60.

The Office notes, however, that credits vary widely among institutions. "Some universities have granted as much as a full year of credit toward a bachelor's degree" for work in Advanced Placement. Others have not been as generous.

Concern has been voiced in other quarters on the effect APP can have on colleges, including a fuzziness of the admissions picture and a trend toward a "two-track" college course of study.

One of the most accelerated advanced placement programs will be conducted next fall at the University of Southern California. Thirty superior students from Los Angeles who have completed their junior year in high school will enroll at USC. Living in campus dormitories and attending both special and regular USC classes, the students will finish their senior year of high school and their freshman year of college in the fall and spring semesters. In June they will return to their high schools to graduate with their classes, but they will also be ready for their sophomore year of college.

Cloudy South

Southern education has "failed to keep pace with demands of our present society," declared HEW Secretary Abraham Ribicoff. He told a conference on Goals for Higher Education in the South, sponsored by the Southern Regional Education Board, that "if southern education fails academically, your region will fail economically.

"Your ability to attract the best teachers and the best students has been impaired. Many of the students leaving the South for an education

in the North and West are topnotch students seeking a topnotch education. And many who go to the South from the North and West are mediocre students seeking an easy education."

The Southern Regional Education Board reports that while 30 percent of the nation's population lives in the South, the region's higher education institutions do only 17 percent of the nation's research.

Rx For Teachers

Schools have not paid enough attention to the health of teachers, maintained speakers at the American Medical Association convention.

Dr. Lemuel C. McGee, president of the Delaware Medical Association, said, "The chief function of any form of school organization is to provide the most favorable environment for teaching and learning. This means the provision of an atmosphere where the physical, emotional, and social factors are conducive to good teaching and learning. Possibly in no group is health—physical, mental, and social—more important than in America's teachers. Consequently, just as industrial management has accepted a degree of responsibility for the health and well-being of its employees, so should the management of a school system accept its similar responsibility for occupational health surveillance for teachers.

"Pupils are clearly entitled to a teacher with physical well-being and emotional stability," he said.

Dr. George L. Cushman, school physician at North Woodbury, Conn., said that protection and promotion of the health of school personnel though periodic medical examinations have been overlooked until relatively recently. He stressed the following aims in any health program for school employees:

1. Employment of physically and emotionally fit persons.
2. Determination of total health status of these individuals.
3. Correction of any defects currently present.
4. Execution of annual and bi-annual routine examinations.

New Chair

A new administration post—possibly the first of its kind—has been created in the Washington, D. C. school system: Assistant Superintendent of Schools in charge of the Urban Service Corps. Appointed to the $13,000-a-year post is Benjamin J. Henley, a 30-year veteran of the Washington system. The Corps enlists volunteer workers to assist school officials in programs to curb juvenile delinquency.

Not Underestimated

Special seminars for "mature, able women whose formal education was completed some time ago" will get underway next month in Great Neck, Long Island. Great Neck schools, aided by three local colleges, will administer the special adult education program with a pilot group of twenty-five women.

Womanpower is gaining more attention nationally. The American Council on Education has a Commission on the Education of Women, chaired by Mrs. Opal David, which is planning a full-scale conference on the subject in 1962. The ACE group notes a U. S. Department of Labor estimate that the number of women workers will increase at twice the rate of men workers during the 1960's and is concerned that the women "be employed in jobs commensurate with their abilities." A Carnegie Corporation grant of $23,000 is helping finance the 1962 conference.

What Do Young People Learn About War?

In one of history's most perilous decades, educators have the task of teaching the causes of war to today's youth. Next month read how Germany, Italy, Japan, and the U. S. are telling the story of World War II in

Why Daddy Went to War

A new dimension in educational journalism in the September

OVERVIEW

On The Air

"Update," a weekly television news program for junior and senior high school students, will be presented on NBC-TV network Saturdays at 12 noon (EST), starting Sept. 16. Robert Abernethy, NBC News' Washington correspondent, will be on-the-air editor of the new half-hour program.

"Update" will feature a review of the week's headline-making events, analysis of the week's most important news story, a student-reporter segment in which high school correspondents will interview prominent people of their own choice, late news reports, and a forecast of people, places, and events to watch during the coming week.

In another announcement, NBC said that a course in American government will be taught in the fall over "Continental Classroom." The early-morning lesson (6:30 to 7 EST) will be taught by Dr. Peter Odegard of the University of California at Berkeley. More than 300 colleges and universities are expected to offer the course for full academic credit. The series will be carried by about 170 stations. As in the past, "Continental Classroom" will also rerun the previous season's course, in this case contemporary mathematics.

Paper School

Superintendent C. Taylor Whittier of Montgomery County, Md. thinks a twelve-month school plan is a good idea. And he has come up with an unusual method of convincing the public. Starting next fall, he is going to try it out—on paper.

The first step, Whittier said, "is to educate the public to what it will mean. Until that is accomplished it

is unfair to ask them for a judgment."

For the practice exercise, Whittier will select two high schools—one small and one large—and, after the students have been enrolled in the usual way, redistribute the same student body on paper for a twelve-month operation.

Enrollment at elementary and junior high schools which send students to the high schools also will be reorganized. In this way, Whittier said, school officials can see if they could comply with vacation schedule requests from parents with children at different school levels.

The mock trial will also give administrators a chance to see if an actual enrollment could be distributed so that demand for special courses, such as business law or psychology, is concentrated in one or two enrollment shifts.

TV Crime Won't Pay

Television shows aimed at children are "indefensibly wasteful," declared Newton N. Minow, chairman of the Federal Communications Commission. He told a Senate subcommittee that the FCC might not renew the licenses of stations giving viewers larger doses of crime and violence.

Viewers could do much, he said, by making their protests known.

"I don't think most people know that the public owns the airwaves," he emphasized. "If you took a poll of the country, I don't think most people are aware of the power they have over broadcasting."

Minow said a station's program content would be considered when it applied for renewal of its three-year federal license. The question, he said, is "whether the licensee has made a diligent, positive, and continuing effort to discover and meet the tastes, needs, and desires of his community or service area."

The chairman also recommended more educational television as a source of better programming for youths.

Another witness, LeRoy Collins, president of the National Association of Broadcasters, said, "The weight of sociological opinion does not justify a conclusion supporting a causal relationship between television crime and violence and criminal tendencies." The subcommittee is inquiring into possible links between television crime shows and juvenile delinquency.

Attack Drop-Outs

A national clearinghouse for programs to combat the growing problem of youngsters who drop out of school will be established with a $190,000 Ford Foundation grant to the NEA. The center's director will be Daniel Scheiber, former school principal who headed New York City's "Higher Horizons" program for slum-neighborhood children.

The NEA clearinghouse will collect, analyze, and distribute data on efforts to deal with the drop-out and youth-employment problems. It will provide consulting services to schools and community agencies and also sponsor conferences on the effects of reading ability, motivation, and work-study programs.

Academic Shortage

Not enough persons are being trained to teach in college, according to the NEA's biennial report. Ray Maul, assistant director of NEA Research, states that colleges should be prepared to employ 28,900 new teachers next month, and by 1970 the annual need will rise to 35,700 new teachers to serve a total enrollment of 6,150,000.

"At this moment," Maul reports, "the resources are not in sight to provide this enormous expansion of teaching staff. . . . it seems clear that the institutions of higher education cannot be staffed with the needed number of competent teachers unless their financial resources are vastly expanded. With a continuance of the present level of support the employing officer has no alternative but to choose between an insufficient number and an inferior quality of teachers."

Comparison with the 1953–54 study reveals that the percent of faculty members holding doctor's degrees has fallen off considerably. In 1953–54, 40 percent of college and university faculties held Ph.D. degrees, while only 25 percent of the new teachers employed in recent years have been holders of doctorates.

New teachers with less than a master's degree were 18.2 percent of the total in 1953–54. That percentage rose during the next four years but has now declined to 17.4 percent.

Well-MET

The first educational television station for the metropolitan New York City area will go on the air in January if the Federal Communications Commission approves the sale of WNTA-TV. The station was purchased for $6.2 million by Educational Television for the Metropolitan Area, Inc., a corporation formed to represent a citizens' group that has been seeking to purchase the channel since last February. Substantial funds for the purchase were given by the three television networks, local commercial stations, and many corporations and individuals.

The only possible hitch in the sale is objection by the State of New Jersey because WNTA-TV is the only channel legally assigned to it. Pennsylvania stations blanket the southern part of the state and New York stations the northern part. In a brief filed with the FCC, the state maintains that the channel was originally allocated as a New Jersey-orientated station. Its studios are in New York City. The new station will be called WMET.

Unfriendly Fellowship

A 33-year-old graduate student at the University of Illinois lost his $3,800 National Science Foundation fellowship as a result of his conviction on contempt of Congress charges. The NSF came under fire from two Congressional groups for giving the fellowship to Edward Yellin who balked at answering questions about alleged Communist affiliation in 1958.

Although the NSF defended the

fellowship award at first, it was later revoked on the grounds that Yellin might not be able to complete the fellowship year—in other words, that he may be sent to jail if his appeal to the Supreme Court is denied.

In his application for the grant, Yellin signed the required oath pledging that he did not believe in or support any organization that teaches overthrow of the government by force. He also signed an oath of allegiance to uphold the Constitution.

Yesterday's Jobs

High school guidance counselors reach vocational students too late and when they reach them at all, it is often with out-of-date information. David White, personnel director of Kennecot Refining Co., also noted that many students are being trained for "jobs that are non-existent." Speaking at the annual meeting of the International Association of Personnel in Employment Security, White called for administrators of vocational high schools to face up to the realities of todays'—and tomorrow's—job market.

In Washington, President Kennedy's jobless retraining program was reported out of a Senate Labor subcommittee. The $100 million program would subsidize the training of unemployed men and women to steer them into better job opportunities. The controversial relocation provision, whereby the government would pay workers who moved from areas of high unemployment to areas of labor scarcity, was sliced out by the committee. However, the employment picture is shifting enough, observers feel, that passage of the measure by this Congress is unlikely.

After a brief spring pickup, the Department of Labor reports one of the most extreme Junes on record. June, 1961, showed both the highest rate of employment and the highest rate of *un*employment since the postwar 40's. Major reason: the sudden influx of school and college graduates into the labor market.

Pushbutton Panacea

Class scheduling, a large-sized headache for administrators of mushrooming schools and colleges, may be solved in the future by a high-speed digital computer being devised by University of Pittsburgh engineers. With help from HEW, Pitt researchers hope to come up with "a universal computer system which can be used at any educational institution for class scheduling."

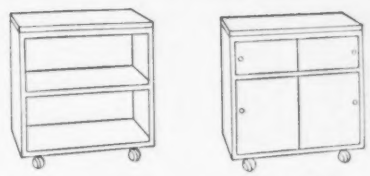
The computer would also evaluate student records and make a desirable course list for each student. Dr. W. R. Turkes, associate dean of Pitt's school of engineering and mines, notes that Pitt now enrolls 15,000 students in eighteen undergraduate and graduate schools. Manual scheduling has become a gigantic job.

IBM, whose equipment is now in use at Pitt, has made an initial grant of $83,000 to the NEA for a long-range study of the impact of technological change on education. Dr. Luther Evans, former Librarian of

Circle **OV-233** on reply card, last page

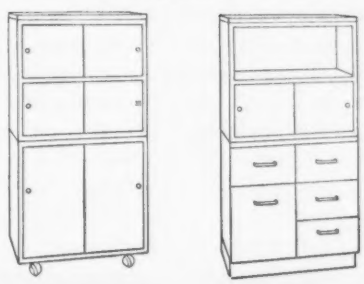
Shown below are several models of HONOR Classroom storage cabinets. Available with or without sliding steel doors; also with rolling casters or legs with adjustable glides.

LO-LEVEL MODELS

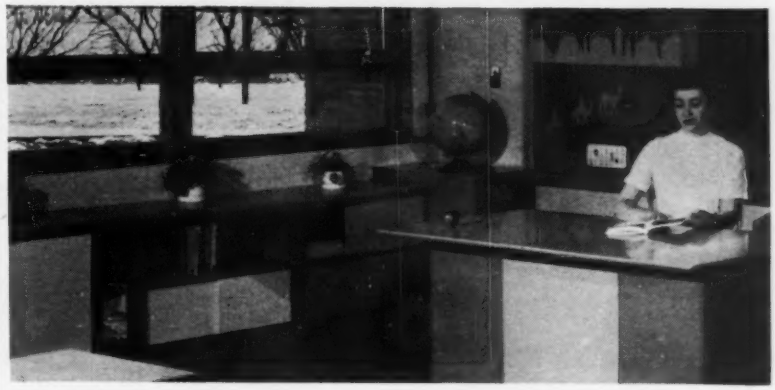


NO. 5R7ZAOO NO. 5R7ZEOO
29¾" wide X 16" deep X 25¼" high

HI-LEVEL MODELS



NO. 5R7ZCZF NO. 5R856ZG
29¾" wide X 16" deep X 48" high (base) 46¾" (casters)



HONOR Classroom Cabinets

offer unexcelled flexibility at moderate cost!

■ These modular units are easily moved around so that the teacher can rearrange to best serve classroom activities. Shelves are adjustable to take books, paper or other materials, and for display purposes. Constructed of long-lasting steel. Plastic top. Durable baked enamel over a rust-resistant base coat. Colorful choice of door panels; grey or blue cabinets; natural grain top.

Write for name of nearest HONOR distributor

HONOR *especially for schools*

BY THE H-O-N CO. MUSCATINE, IOWA

Roundup (continued)

Congress and now finishing up a two-year study of government libraries for the Brookings Institution, will direct the project.

Already underway are two other IBM projects affecting education: an electronic law library (in which Pitt has also been involved) and a $100,000 survey of automation possibilities in large research libraries (by a team headed by Gilbert King, IBM research director).

Higher Illiteracy

Modern man is in danger of becoming a "higher illiterate," someone "unable to relate the content of verbal communication to events which at each moment are shaping the future."

"While simple illiteracy is easily recognizable," Francis Chase, dean of the University of Chicago's school of education, described the "higher illiterate" to a thousand teachers and administrators attending Chicago's 24th Annual Reading Conference as a person "who refuses to understand, although he is able to see, hear, and even read . . . [who] cannot enter sympathetically into the aspirations of peoples of other classes, races, or cultures."

Meanwhile, Denver, Colo., parents who start their children reading at pre-school age will get help via a 16-chapter television course and guidebook, produced by the city schools and financed by a $61,900 grant from the Carnegie Corp. Denver schools presented its pioneering 13-chapter TV series last year and sold an accompanying guidebook, "Preparing Your Child for Reading."

Raiding

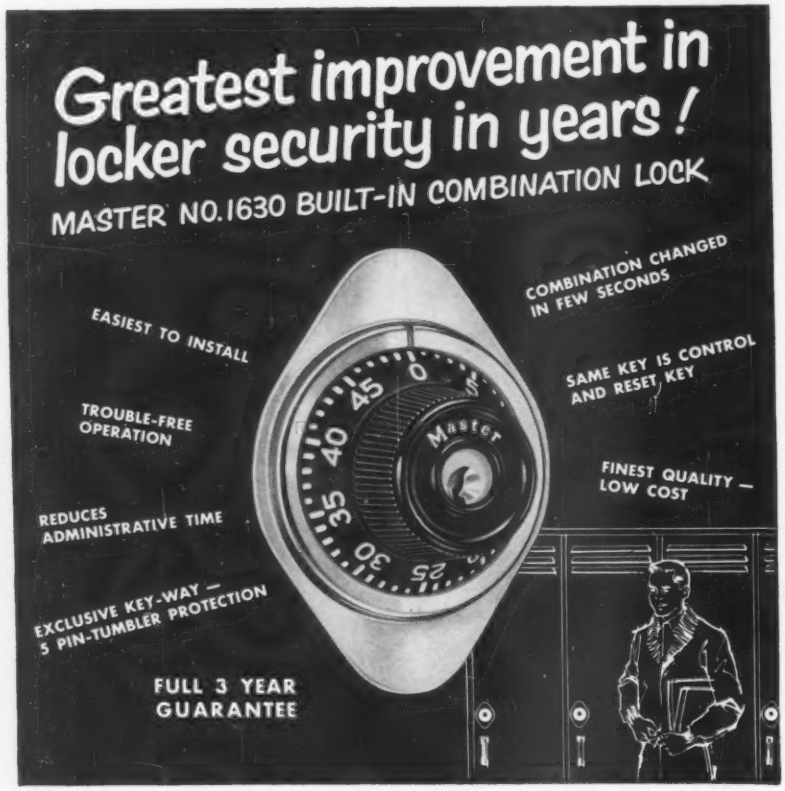
Top caliber professors at the University of Maryland are being "picked off" by other colleges offering substantial salary raises. Wilson H. Elkins, U. of M. president, told the State Board of Regents that a salary scale to attract and keep distinguished faculty members is one of the University's most pressing needs as it prepares for a 50 percent increase in enrollment (14,000 to 22,000) in the next four years. He cited one professor who recently left to accept a $7,000 increase at another school.

He said that the university must experiment "with better and more efficient ways of teaching large numbers of students if it is going to offer them quality education." One possible change: reducing the number of undergraduate courses by about 25 percent.

Mirror

How good is Pennsylvania State University? By 1965 University officials expect to know because they have launched a department-by-department evaluation. President Eric A. Walker said it probably will be more soul-searching than any self-study ever before attempted by a major institution. Purpose of the program, he said, is to determine "the professional merit of what we are doing; and if what we are doing is not good, to find out how we can improve it." ●

Circle OV-234 on reply card, last page

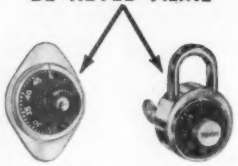

Greatest improvement in locker security in years!
MASTER NO. 1630 BUILT-IN COMBINATION LOCK
EASIEST TO INSTALL
TROUBLE-FREE OPERATION
REDUCES ADMINISTRATIVE TIME
EXCLUSIVE KEY-WAY — 5 PIN-TUMBLER PROTECTION
FULL 3 YEAR GUARANTEE
COMBINATION CHANGED IN FEW SECONDS
SAME KEY IS CONTROL AND RESET KEY
FINEST QUALITY — LOW COST
Master

Master®
STANDARD OF SECURITY THE WORLD OVER

School administrators, locker experts and maintenance supervisors enthusiastically praise MASTER's No. 1630 as America's finest built-in combination locker lock. In addition to highest quality and top performance, exclusive features of the No. 1630 sharply reduce the administrative problems of busy school executives. Write for a FREE brochure. No obligation.

Master Lock Company.
Milwaukee 45, Wisconsin
World's Largest Padlock Manufacturers

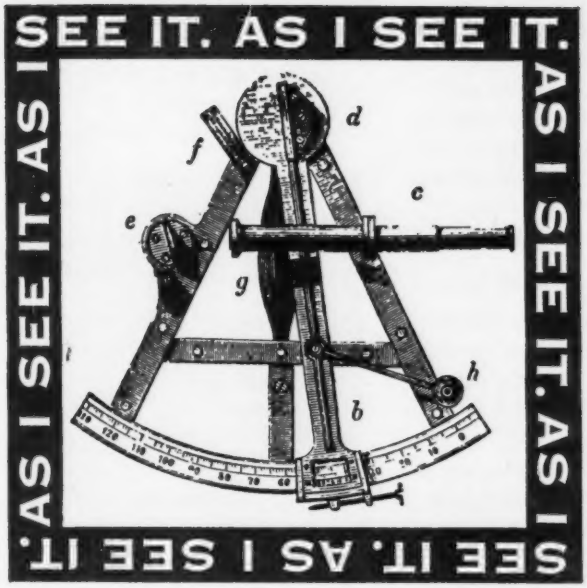
HALL LOCKERS AND GYM LOCKERS MAY BE KEYED ALIKE



No. 1630 No. 1525

For safety and convenience, one school-owned control key opens every student locker... built-in lock, or padlock!

No. 1500 . . . same as No. 1525 but without key-control.



Teaching Machines

Walter D. Cocking comments on the current scene

THE TEACHING MACHINE at the moment is of interest and exciting speculation to administrators and to the whole teaching profession. Of course the teaching machine is not new. It is as old as the book and the chalkboard. What is new is the application of electronics and automation to the teaching machine. A virtual rash of new teaching machines has burst on the school equipment market. Accompanying this is promotional material of all kinds setting forth the wonders of these machines and the achievements which may be expected.

One result is that administrators and teachers have been stimulated to learn more about such machines and in many cases to experiment with them. Several cautions, however, should guide the educator in his consideration of teaching machines: (1) the educator should be sure he knows what the machine can and cannot do; (2) he should be sure all users of the machine have the skill to operate it; and (3) he should be sure the machine is used for the types of learning it is produced to aid. With these cautions in mind, the administrator can put teaching machines to work helping teachers with their routine tasks of imparting information.

Unfortunately, it is reliably estimated that 90 percent and more of the time of the average teacher is spent on teaching information, leaving a completely inadequate amount of time to the most important phases of learning. Teaching information is relatively simple. Translating information into knowledge and knowledge into understanding—the most important phases—are difficult and complex.

Here is where the teaching machine comes into the picture in an important way. There are already on the market several machines which teach information. Others will be forthcoming. Undoubtedly all will be improved in many respects. It is entirely realistic to anticipate that the future teaching machine will become the chief purveyor of information of all kinds. If such proves to be the case, the teacher will be freed to devote his time to helping the learner to translate information into knowledge and knowledge into understanding.

I am equally sure that teaching machines, when fully perfected, will teach information as effectively as human teachers ever have done. As I see it, this is the great potential of the teaching machine in learning.

It would be wrong to think of the teaching machine as taking the place of teachers. It is and can be an important aid to teachers. Let's make sure that this point is understood by the teaching profession and by the general public. With the present and anticipated future shortage of teaching manpower, teaching machines can assist in many ways to aid the teacher and to make it possible for him to do a better job.

I would also comment on the real need to demonstrate extensively such teaching machines that are to be used in a given school system or college. Teachers, curriculum coordinators, and administrators should participate in the demonstrations with opportunity for extensive discussion on the demonstration and the results secured.

In addition, I would emphasize the need for extensive experimentation to determine to what uses the machine can be put, what procedures to use, and the kinds and quality of results secured under varying conditions.

Finally, there is need for continuous evaluation of the machines, their use, and their effect on teachers and learners. In these ways needs and plans for new machines will be found.

As one who firmly believes that teaching machines can have a very beneficial function in teaching and learning, I would advocate the use of teaching machines to the greatest extent possible. They can become one of the most valuable adjuncts to quality teaching and excellence in learning. ●

PRODUCT PREVIEW

COLOR FOR CONCRETE

Kwik-Color Concrete Seal applies non-fading color to concrete floors and eliminates concrete dusting permanently. This product, made from an emulsified plastic resin, is practically odorless, non-inflammable, water-resistant, and easy to apply on either new or old concrete. One gallon covers approximately 800 sq. ft. of concrete. Available in permanent non-fading Tile Red, Light Gray, and Light Green. Multi-Clean Products, Inc., St. Paul, Minn.

Circle **OV-301** on reply card, last page

LIQUID ROOF TREATMENT

Liqui-Mat is a new method to cut the cost of roof resurfacing. It employs a scientific blend of high solids content asphalt emulsion, glass fibers and rough, curly bristles. When applied, the asphalt and the fibers interlock forming a tough, monolithic protective blanket. Many difficult roof applications can be economically resurfaced with one-coat application of Liqui-Mat. It leaves no seam; will not crease or check. Hard-to-get-at places, valleys, and irregular surfaces can be coated simply and effectively. Tremco Mfg. Co., 10701 Shaker Blvd., Cleveland 4, Ohio.

Circle **OV-302** on reply card, last page

SIX NEW COLORS IN ASPHALT TILE

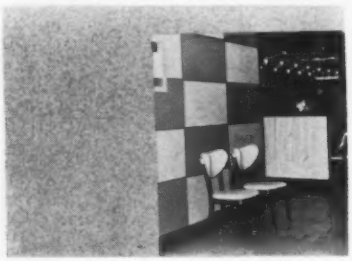
Unusual styling of six new colors added to the Azrock asphalt tile line creates the effect of textured carpet. Colors are K-591 Mocha Chip, tan background with beige and white chips; K-592 Almond Cream, cream background with almond and beige chips; K-593 Avalon Gray, gray background with light gray and white chips; K-594 Rose Antique, tan background with rose and white chips; K-595 Bermuda, pastel aqua background with aqua and white chips; K-596 Wheat, pastel yellow background with yellow and white chips.

The new colors will be available in $\frac{1}{8}''$ thickness, $9'' \times 9''$ size. Azrock Floor Products Div., Uvalde Rock Asphalt Co., Box 531, San Antonio, Tex.

Circle **OV-303** on reply card, last page

COLORFUL PLASTIC LAMINATES

Textolite now comes in a new pattern called Mist Solid which, although it is a delicate, misty color

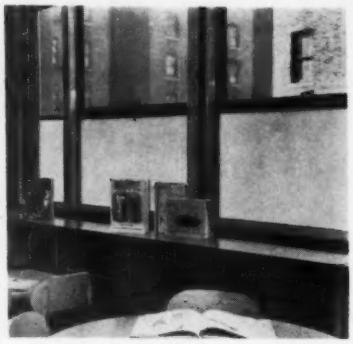


effect, gives the impression of being a solid color laminate when viewed on any horizontal or vertical surface. The result is the effect of a solid color laminate that costs less than solid color prices. An additional advantage is that it will stay new looking longer than solid colors. General Electric, Laminated Products Dept., Coshocton, Ohio.

Circle **OV-304** on reply card, last page

PLASTIC PANELS FOR WINDOW REPLACEMENTS

The use of Fiberglas reinforced-plastic panels in place of conventional glass for windows is currently being



tested in some of the schools of the N. Y. Public School System. Inspections have indicated that the breakage problem has thus far been completely eliminated, students are no longer distracted by occurrences outside, glare has been considerably reduced, and the panels add to the attractive appearance of the classroom.

Fiberglas Daylighting Panels use acrylic resin as the bonding agent for the glass fibers. The Lucite resin gives the panel outstanding resistance to weathering of all kinds and provides superior light diffusion. Owens-Corning Fiberglas Corp., 717 Fifth Ave., New York 22, N. Y.

Circle **OV-305** on reply card, last page

LOW COST ALUMINUM CURTAIN WALL SYSTEM

A new low cost curtain wall system has been developed for one- and two-story construction. All components of the wall, including panels and ventilators, lap and interlock without the use of nuts and bolts, to form a solid, water-tight unit. Horizontals and verticals are pre-cut at the factory to dimensions required in the field to execute the architect's design, and are shipped knocked down to the job site for installation without further fabrication.

Engineering features of the 710 Series include: 1) an unbroken watertight seal throughout the entire wall; 2) lapped rather than butted connections which permit expansion while maintaining water-tight integ-

rity; and 3) a new "T" design mullion with a thin profile eliminating the bulk of conventional rectangular aluminum verticals. Pacific Curtainwall, Inc., 600 W. 15 St., Long Beach 13, Calif.

Circle **OV-306** on reply card, last page

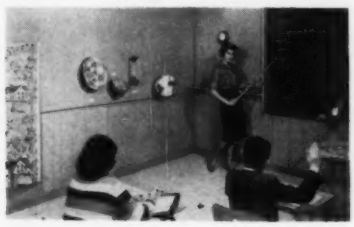
DISTINCTIVE PORCELAIN ENAMELED PANELS

Striking design effects are possible in porcelain enameled panels to meet the creative ideas of today's architects. Matte, semi-matte, and stipple finishes, textures and patterns, and simulated bas relief treatments are some of the possibilities for unusual building facades. Murals in four colors can be fused directly into the steel insulated panels, which are both decorative and practical. The Erie Enameling Co., 1400 W. 20 St., Erie, Pa.

Circle **OV-307** on reply card, last page

DECORATIVE HARDBOARD

Sandalite presents for the first time a hardboard panel with a decorative scatter mosaic design in color.



It is ideal for interior uses such as wall paneling and wainscoting in schools. Its lustrous finish is baked in permanently; it won't wear off, is impervious to water, oil, food stains, dirt, grease, bumps and nicks. Available in plain and punched panels of varying thicknesses. Forest Fiber Products Co., P. O. Box 68, Forest Grove, Ore.

Circle **OV-308** on reply card, last page

PRE-FINISHED WALL PANELING

Fourteen different combinations of wood varieties, colors and styles are available in Shastawood, a pre-finished wall paneling. The product is a 7⅜" face, tongue and groove wall paneling, 7', 8', and 10' long, available in Incense Cedar and White Fir. Suitable for either new construction or remodeling.

This paneling produces a wall of solid wood ¾" thick with a sculptured surface giving a desirable play of light and shadow. The material contains random knots and pecks and other natural wood characteristics which give each piece of paneling a character slightly different from any other. Scott Lumber Co., Inc., Burney, Calif.

Circle **OV-309** on reply card, last page

INCOMBUSTIBLE CEILING TILE

A low-cost incombustible ceiling tile that meets all Class A requirements, has been introduced by the Bestwall Gypsum Co. Reinforced with glass fibers, this product is a pre-decorated lay-in unit designed for use in conventional exposed grid suspended ceilings. It is especially recommended for use in schools. The tile comes in 24" × 24" units of ⅜" thickness.

Available in plain or textured white finishes, it has a .78 light reflection coefficient. Bestwall Gypsum Co., 120 E. Lancaster Ave., Ardmore, Pa.

Circle **OV-310** on reply card, last page

COATING FOR PAINT

Plex-Glaze is a high-gloss, diamond-hard protective coating for paints. The product is unusual for its glazed effect—not too dissimilar in appearance to cement enamel, and its economical price. A gallon of Plex-Glaze covers 350 sq. ft. on most painted surfaces, even further on extremely non-porous painted surfaces. Spray or brush application involves two coats with an allowance of 30 minutes' drying time between each coat. Plextone Corp. of America, Newark 4, N. J.

Circle **OV-311** on reply card, last page

VINYL WALL COVERING

A number of new patterns and colors have been added to the Frederic Blank & Co. line of fabric-baked vinyl wall coverings. New styles include: Luau, a heavy-duty vinyl in colors and weaves suggestive of the South Seas; Carib Straw, a Fabron number in West Indies-type colors and prints, and Brasilia, a new line of wood-grain vinyls made in heavy-duty weights. Many new colors have been added to existing lines. Frederic Blank & Co., 295 Fifth Ave., New York, N. Y.

Circle **OV-312** on reply card, last page

PANEL WALL INSTALLATION SYSTEM

The Kalwall Standard Series Installation System is based on a new

concept in wall engineering. The series includes clamp-action head, self-flashing sill, jamb, and panel to panel closures. These are added to Kalwall's existing line of closures to provide the new features of lightness, easy handling and erection, and increased economies of construction. Installation of the wall is rapid, accomplished with minimum labor and equipment—as little as one man and a screwdriver. Kalwall Corp., 43 Union St., Manchester, N. H.

Circle **OV-313** on reply card, last page

COLORED FACE BRICK

A new line of silica brick called Colorguard is being offered in white, salmon, pink, red, tan, yellow and green. Outstanding characteristics of the new brick are: uniformity of size, load-bearing strength and permanent, locked-in color. Smooth texture and square clean edges mean faster and more economical bricklaying. Three sizes are available: standard (2¼ × 3⅝ × 8"), jumbo-regular (2⅝ × 3⅝ × 8"), and jumbo-oversize (2¾ × 3⅝ × 8"). U. S. Plywood Corp., 55 W. 44 St., New York 36, N. Y.

Circle **OV-314** on reply card, last page

Use the business reply card on the last page for more information on any of the products in this section.

Circle **OV-235** on reply card, last page

See it for real in 3-D

StereoZoom Microscopes show the most understandable images of the specimen you've ever seen. You see it magnified naturally, in three dimensions, upright and unreversed. You see it in depth, with the details of its structure in their true relationship.

...and zoom to any magnification from 3.5X to 120X

Just turn the zoom knob. That's all there is to it. Instead of a few arbitrary fixed powers you have an infinite number of repeatable magnifications throughout the entire range of the instrument. (Available from 3.5X to 120X.) See the specimen better than ever before... in magnifications you've never seen before!

BAUSCH & LOMB
SINCE 1853

Made in America, to the world's highest standards.

BAUSCH & LOMB INCORPORATED
68520 Bausch Street, Rochester 2, N. Y.

☐ Please demonstrate StereoZoom Microscopes.
☐ Please send Catalog D-15.

NAME, TITLE .....

PROFESSIONAL ADDRESS .....

.....

.....

OF GENERAL INTEREST

OVERHEAD PROJECTOR

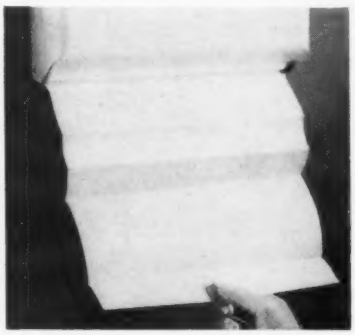
The new Thermo-Fax Overhead Projector combines easy portability with all the advantages of big-machine quality projection. It has a full 10″ × 10″ transparency stage, bright 500 watt lamp—and yet is self-contained in its own traveling case. Spring-loaded leg adjusts height. Removable head is stored in the projector base together with spare lamp and the 10′ projector cord. A thermostat control automatically cools the projector lamp when the machine is turned off.

Projection takes place in a fully lighted room so that the instructor can keep in direct eye contact with his students. Minnesota Mining & Mfg. Co., St. Paul 6, Minn.

Circle **OV-315** on reply card, last page

PAPER TOWELING

An ingenious new folding arrangement permits automatic dispensing of



a fully opened C-fold paper towel. The user of the Sorbette Twin-C Towel grasps one thickness and the towel automatically opens to full size as it is pulled from the dispenser. The larger dispensed size discourages unnecessary use of towels. Exceptional moisture capacity further assures the economies of single towel use. Crown Zellerbach Corp., One Bush St., San Francisco, Calif.

Circle **OV-316** on reply card, last page

SCRUBBER-POLISHER

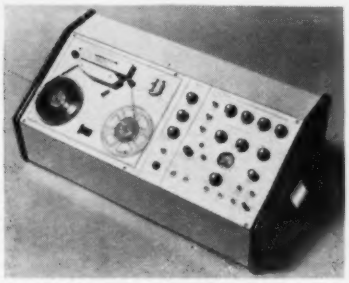
Low cost and increased maneuverability are main features of the new 21″ Convertamatic scrubber-polisher.

Two basic maintenance operations are performed by the machine. In one pass over the floor, the machine lays the cleaning solution, scrubs a 21" swath, vacuums the dirty solution and finally dries the floor. In addition, the machine may be used for buffing and vacuuming. Machine cleans up to 80,000 sq. ft. on one battery charge. Advance Floor Machine Co., Spring Park, Minn.

Circle **OV-317** on reply card, last page

PORTABLE LANGUAGE LABORATORY UNIT

A new model of the portable Monitor Consolet for language laboratories now accommodates 20 student positions instead of 12, with almost no increase in cabinet size or price. The unit has Formica-finished top and front, brushed aluminum non-glare control panel and natural wood sides with furniture-type hardware. Teaching control facilities include simultaneous transmission of up to three separate programs, remote control of booth recorders for mass tape duplication, private instructor monitoring of each booth and private two-way instructor-student communication. The unit is equipped with the Monitor Remotester for examinations, which automatically stops student tapes while questions are being transmitted, and starts them again to record answers only. Electronic Teaching Laboratories, 5034 Wisconsin Ave., N.W., Washington 16, D. C.

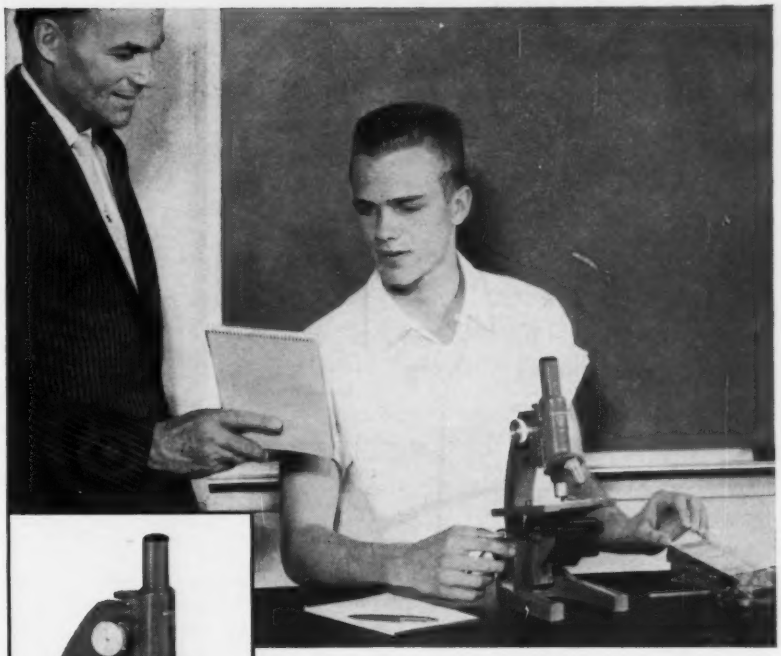


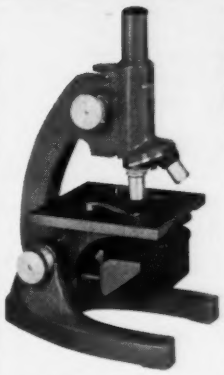
Circle **OV-318** on reply card, last page

MODULAR SEATING

Square steel tubing, foam rubber upholstery and wood-plastic laminates have been combined to form a good-looking group designed by Henry P. Glass to fulfill almost any

Circle **OV-236** on reply card, last page





BAUSCH & LOMB STANDARD TEACHING MICROSCOPES

Standard size and operation, with optics of laboratory microscope excellence.

BAUSCH & LOMB TRI-SIMPLEX MICROPROJECTOR

Projects mounted specimens or living organisms on screen or tracing pad.

BAUSCH & LOMB BUNSEN SPECTROSCOPE

This basic tool of chemical analysis shows spectra of elements.

BAUSCH & LOMB

SINCE 1853

Costs are far less when you buy Bausch & Lomb!

You get extra *years* of use out of this all-time best selling school microscope. And your investment is protected for life.

STANDARD TEACHING MICROSCOPES take all the punishment your students can give them—proved by years of maximum use. And now the new exclusive Bausch & Lomb force-proof clutch and lifetime ball-bearing focus make them even more student-proof!

Like all B&L instruments, they're made in America, to the world's highest standards. They're guaranteed for life against defects in workmanship or materials. A nation-wide network of B&L dealers provides you with prompt service.

That's why it costs you far less to buy B&L.

GET YOUR FREE COPY!
of this data brochure covering the world's finest teaching tools for the balanced science program.

Made in America, to the world's highest standards.

BAUSCH & LOMB INCORPORATED
69220 Bausch Street, Rochester 2, N. Y.

Please send Brochure D-152, "Recommended Instrumentation for Life Science Teaching."

NAME, TITLE .....

SCHOOL .....

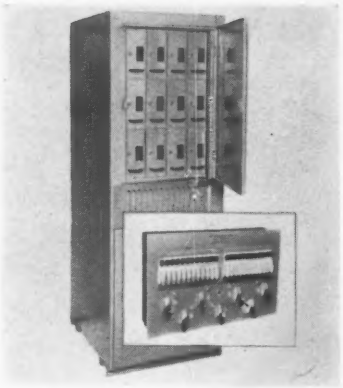
ADDRESS .....

type of lounge or reception room seating requirements. Basic units consist of a lounge chair and a two-seater settee, both of which can be armless or with one or two arms. Table tops are available in three rectangular sizes. Royal Metal Mfg. Co., One Park Ave., New York 16, N. Y.

Circle **OV-319** on reply card, last page

U/L APPROVED DIMMER

Kliegl Bros. have just received U/L approval of their SCR dimmer



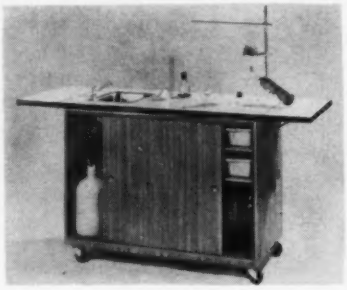
in 4, 5, and 6 KW capacities. The illustration shows a typical example of an SCR dimmer bank and remote control console that would be suitable for use in schools.

The control console (inset) may be located remotely from the rest of the system. Because the signal current for this installation is only 24 volts D.C., light-duty cable is used to connect the potentiometers and the dimmers, to give the systems high flexibility. Kliegl Bros., 321 W. 50 St., New York 19, N. Y.

Circle **OV-320** on reply card, last page

MOBILE SCIENCE LABORATORY

The mobile science laboratory fully equipped for classroom demonstrations, can be wheeled from room



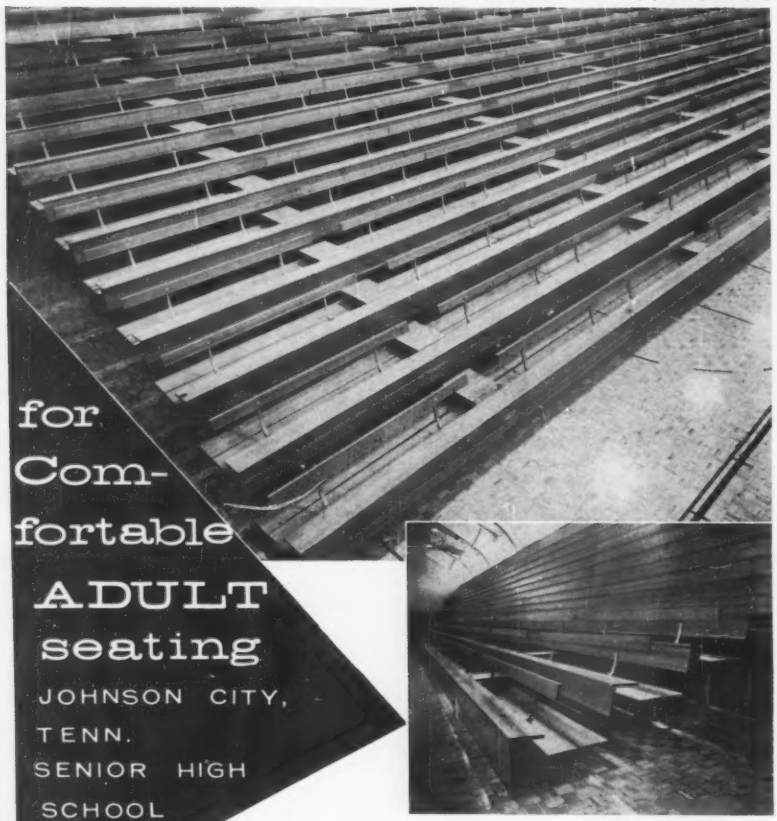
to room. It is furnished with Elkay stainless steel sink, pump and faucet, with two unbreakable 2 gallon polyethylene bottles for fresh water and drainage. Two tote trays, two grounded duplex electrical outlets with extension cords, a Greenlaw arm, and a propane bunsen burner with holder are furnished. The unit is completely surfaced on the interior and exterior with Nevamar high-pressure plastic laminates for easy maintenance. National School Furniture Co., Odenton, Md.

Circle **OV-321** on reply card, last page

VINYL WALLCLOTH

Cost - conscious management of schools, coileges and universities facing major redecorating programs might look into the savings that can be realized through the installation of a lightweight vinyl wallcloth. Fabrique is such a wallcovering of 50% cotton and 50% rayon textile fibers, vinyl impregnated. It is virtually stainproof and a little soap and

Circle **OV-237** on reply card, last page



BERLIN
EZ-A-WAY
Bleachers

Correct posture, comfortable, convenient are these EZ-A-WAY Folding Bleachers, described in more detail in the paragraphs to the right. Easily folded away, or prepared for occupancy, here is adult premium seating . . . opera style when seats and backrests are padded.

Like all EZ-A-WAY Folding Bleachers the Johnson City installation has the Berlin original construction features that have made them the preferred folding bleachers for gymnasiums everywhere.

Write for complete details of this type of seating . . . and engineering data for your gymnasium seating requirements.

- AVAILABLE - 30 & 32" back-to-back and 9, 10, or 11½" rise . . . with or without backs or pads
- BACKRESTS - are supported with strong "Aircraft" aluminum brackets . . . light weight for easy operation..
- PADS - for seats and backs are available in any color of cloth backed Vinyl fabric over foam rubber pads.
- OMEGA ELECTRIC DRIVE - for continuous automatic push button operation.

BERLIN CHAPMAN CO.
BERLIN, WISCONSIN

BERLIN
SEATING ENGINEERS
BERLIN CHAPMAN CO.
Berlin, Wisconsin U.S.A.

water cleans walls easily. The Birge Co., Inc., 390 Niagara St., Buffalo 5, N. Y.

Circle **OV-322** on reply card, last page

AUDIBLE PAGING SYSTEM

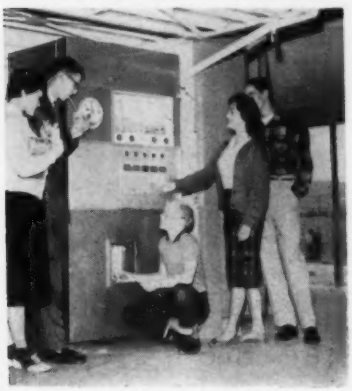
Edwards' new Lokator is designed to page key personnel, in schools and

elsewhere. The system operates simply. Each person frequently paged is assigned a one, two or three-digit code number. Through a network of signals, the Lokator can feed, automatically or manually, sequences of selected code impulses. In turn, these impulses cause signals to sound, at 120 beats-per-minute. Since paging is coded, privacy is assured. Edwards Co., Inc., Norwalk, Conn.

Circle **OV-323** on reply card, last page

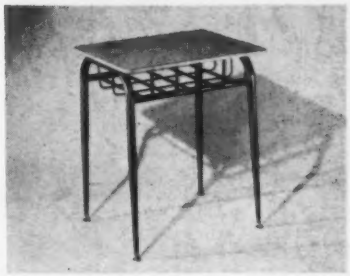
MILK, FRUIT JUICE VENDING MACHINES

Students of the Inglewood Unified School District in California are



drinking 600 extra cartons of milk and fruit juice per vending machine per school day, over and above the normal consumption of milk and fruit juice in the school cafeteria. The machines which dispense the drinks are so simple to operate and care for that women cafeteria employees have been doing the job. United States Chemical Milling Corp., 1700 Rosecrans Ave., Manhattan Beach, Calif.

Circle **OV-324** on reply card, last page



LECTURE DESK

Scholarcraft's individual student desks have a strong tapered steel understructure that is complete with an open type book storage designed to

Circle **OV-238** on reply card, last page

FABRI-FORM
school trays...

...your LOW COST answer to classroom storage problems!

Schools everywhere are solving their classroom storage problems *economically* with Fabri-Form school trays. These trays store student's materials INDIVIDUALLY in home economics, kindergarten, science and chemical labs, art or work-shops, and have many other miscellaneous school storage uses.

Our sturdy plastic trays solve your existing storage problems *immediately*—yet are easily adaptable for later incorporation into a more elaborate storage system. Available in six sizes, all with individual label holders. Architects — write us for complete information!

- Made of sturdy high-impact plastic, with high gloss finish — UNBREAKABLE in normal use
- Smooth surface resists soiling — easily cleaned
- Lightweight and easy to handle — even by small children
- Six sizes with label holders
- Beautiful pale tan, grey or green colors

WRITE FOR DETAILS TODAY!

PLASTICS FABRICATORS

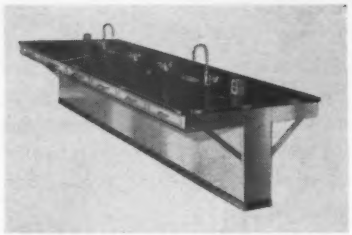
The FABRI-FORM Company, BYESVILLE 4, OHIO

keep this storage completely litter free. The large 20″ × 24″ laminated plastic top is level and permits grouping in any arrangement. Southeastern Metals Co., P. O. Box 5477, North Birmingham 7, Ala.

Circle **OV-325** on reply card, last page

LABORATORY TABLES

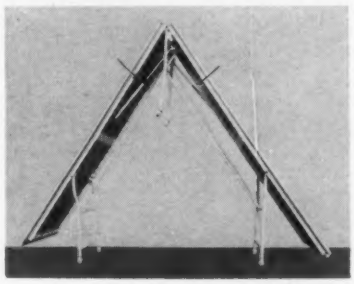
Metalab presents a new treatment in design and function for laboratory equipment with their new Modular Labconsole tables. Completely unobstructed knee space contributes to good posture and comfort. The tables are securely anchored to the floor making them structurally sound. All service piping and wiring is concealed in the structural island, but is easily accessible for maintenance. Choose from a wide range of sizes. Metalab Equipment Co., Duffy Ave., Hicksville, N. Y.



Circle **OV-326** on reply card, last page

FOLDING TABLE ACCESSORY

A tension bar which facilitates opening and closing the folding tables of Schieber Compac-Fold units



is now available as an optional extra. The bar goes into operation as soon as the table is released from the pocket, providing a smooth descent to the floor. In returning the table to its pocket, the bar acts efficiently as a lifting aid in the initial folding operation and continues to exert folding pressure until the unit is fully closed.

The accessory bar is expected to be very useful in schools where women operate the equipment. Schieber Mfg. Co., 12955 Inkster Rd., Detroit 39, Mich.

Circle **OV-327** on reply card, last page

RIBBED MOP BUCKETS

Mop buckets that take the guesswork out of correctly mixing cleaning solutions and eliminate extra measuring cups and pails are the latest additions to the Geerpres line. These buckets are ribbed for additional strength and each rib is a graduation that tells at a glance how many gallons there are in the bucket.

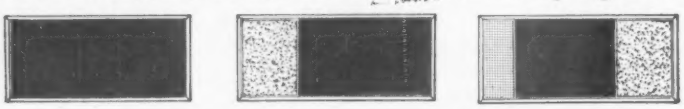
The graduated buckets are available in 4, 8, and 11-gallon sizes with choice of single, twin, or "Convertible" twin models. Models include bucket alone, bucket mounted on ball-bearing casters, and bucket on casters with non-marking rubber bumper. Geerpres Wringer, Inc., Muskegon, Mich.

Circle **OV-328** on reply card, last page

Circle **OV-239** on reply card, last page

SIMPLEX units

CUSTOM-BUILT
to your instructional needs
with chalkboard, corkboard or pegboard



— one material or any combination

A practical solution to diversified chalkboard and mounting problems. You plan each unit according to your requirements. A simple sketch with dimensions and materials indicated is all we need. Your units are built in our factory and delivered to you ready to hang and use. All materials of proven, durable quality. Aluminum trims and chalk troughs are expertly fitted.

Write for more complete information and name of your local dealer

Beckley-Cardy

1900 N. NARRAGANSETT
Chicago 39, Illinois

PRODUCT LITERATURE

Washroom Design

Included in a new four-page brochure are descriptions, pictures, and dimensions of washfountains and group shower equipment by Bradley Washfountain Co., 2203 W. Michigan St., Milwaukee, Wis.

Circle **OV-401** on reply card, last page

Duplicators and How They Function

Ditto Direct Process duplicators can help schools in three major ways; in teaching, in extra-curricular activities, and in the school office. This four-page folder pictures and describes many school uses. Ditto Inc., 6800 McCormick Rd., Chicago 45, Ill.

Circle **OV-402** on reply card, last page

Food Service Equipment

The Fiesta line of soda fountains and fast food service units are shown in full color in a new 6-page catalog. This equipment is available either in stainless steel or with decorative fronts of plastic laminate, of any color or pattern, on all door, drawer and flat surface fronts or with color accent strips along the contoured top edges. Many new features for sanitary operation. The Bastian-Blessing Co., 4203 Peterson Ave., Chicago 46, Ill.

Circle **OV-403** on reply card, last page

Films on Solid Geometry

"Discovering Solids" is a new series of five quarter-hour films to help teach solid geometry to high school juniors and seniors. In the course of the five films, the formulas are developed for finding the volumes and surface areas of each of the six most common solids: cubes, prisms, pyramids, cones, spheres and cylinders. Color or black and white. Cenco Instruments Corp., 1700 Irving Park Rd., Chicago 13, Ill.

Circle **OV-404** on reply card, last page

Plastic for Window Glazing

"Plexiglass Replacement Window Glazing" is a guide for the use of Plexiglass acrylic plastic as a glazing material. Although the booklet is intended primarily for those who are concerned with reglazing in high breakage areas, it is no less useful as a manual for architects and builders who are planning new construction. Particularly important is a section which describes various methods of installing the plastic in windows, doors, skylights and partitions. Rohm & Haas Co., Plastic Sales Dept., Philadelphia 5, Pa.

Circle **OV-405** on reply card, last page

School Seating

Schoolco shows its 700 line of school seating in a new four-color brochure. Construction, color, styling and function are amply illustrated. "Bulletin F-1." Beckley-Cardy Co., 1900 N. Narragansett Ave., Chicago 39, Ill.

Circle **OV-406** on reply card, last page

Central Warehousing Costs

Research material documents costs involved in maintaining a school warehouse. Includes a worksheet to help the school administrator determine warehousing costs in his own school district. Single copies of "What Price School Supply Warehousing" available without charge from the National School Supply & Equipment Assn., 27 E. Monroe St., Chicago 3, Ill.

Circle **OV-407** on reply card, last page

Guidance Testing

The Prep (Pupil Record of Educational Progress) program of guidance testing for grades 6–9 is described in this leaflet.

Circle **OV-240** on reply card, last page

Circle **OV-241** on reply card, last page

Are your buildings flying **DISTRESS SIGNALS?**

Call Western Waterproofing for prompt action to

REPAIR WEATHER DAMAGE
PREVENT FUTURE TROUBLE

Look for these signs of weather decay: Loose Bricks, Interior Wall Dampness, Crumbling Mortar, Disintegrating Concrete.

Property owners lose millions of dollars each year from the slow, steady deterioration of their buildings under constant exposure to rain, wind, snow, frost and other elements. At first, weather damage may be slight, but progresses rapidly, and if not checked, can lead to serious trouble and costly repair bills.

If there's ever a place to exercise an "ounce of prevention", it's in the care of your buildings. Call Western Waterproofing in St. Louis for expert, professional

- **Tuckpointing**
- **Concrete Restoration**
- **Building Cleaning**
- **Sub-Surface Water Protection**

WESTERN WATERPROOFING CO., Inc.
A Missouri Corporation And Its Affiliate
RESTORATION COMPANY
1223 Syndicate Trust Bldg. - St. Louis 1, Mo.
NATIONWIDE SERVICE

Circle **OV-242** on reply card, last page

Use your head instead

Here's the easy way! Babbitt Aerosol Insect Killer sprays away both flying and crawling pests quickly. Yet it's non-toxic, safe for use around foods. No smelly odor! Giant 14-ounce can. Babbitt's 5% DDT Spray is also available, in generous 12-ounce can. A complete line of dependable Babbitt products is available through your sanitary jobber.

If it needs swatting... it needs Babbitt's...

B. T. BABBITT, INC. • Institutional Division
625 MADISON AVENUE, NEW YORK 22, N. Y.

The program provides counselors with information to help them counsel their students about high school plans and educational decisions. Science Research Associates, Inc., 259 E. Erie St., Chicago 11, Ill.

Circle **OV-408** on reply card, last page

School Lunch Program

Ekco-Alcoa Containers, Inc., offers a school lunch brochure which describes a successful application of a school lunch program by a Washington school system. The program features prepackaged lunches. Ekco-Alcoa Containers, Inc., Wheeling & Hintz Roads, Wheeling, Ill.

Circle **OV-409** on reply card, last page

Incinerators

"What Every Architect and Engineer Should Know About Incinerators" is the title of a pamphlet containing answers to 22 of the questions most commonly asked about incineration. Joseph Goder Incinerators, 4241 N. Honore St., Chicago 13, Ill.

Circle **OV-410** on reply card, last page

Incandescent Luminaires

Holophane Co.'s new brochure covers three 13″ square ceiling-recessed incandescent luminaires with prismatic glass reflectors and lenses. A flat, ceiling-level lens, a concave lens, and a dropped-lens luminaire with prismatic side panels are illustrated and described. Holophane Co., Inc., 342 Madison Ave., New York 17, N. Y.

Circle **OV-411** on reply card, last page

Electrical Wiring in Flexicore Slabs

A new 16-page manual explains the use of hollow-core precast concrete floor and roof slabs as raceways for electrical wiring. The Flexicore Co., Inc., 1932 E. Monument Ave., Dayton 1, Ohio.

Circle **OV-412** on reply card, last page

Laboratory Furniture

An extensive new line of laboratory furniture has been designed by Will Corp. This booklet shows Willab's basic furniture units: cabinets, counter tops, tables, desks, lockers, fume hoods, sinks, carts, chairs. Catalog LF-61 from Will Corp., Box 1050, Rochester 3, N. Y.

Circle **OV-413** on reply card, last page

Liquid Asphalt Sealer

Play areas can be rejuvenated with a new liquid asphalt sealer described in a folder from Emulsified Asphalts, Inc., 4900 S. Mason Ave., Chicago 38, Ill.

Circle **OV-414** on reply card, last page

Colorful Exit Devices

Von Duprin announces their new color-styled 77 line of rim, mortise lock and vertical rod exit devices in Bulletin 611.

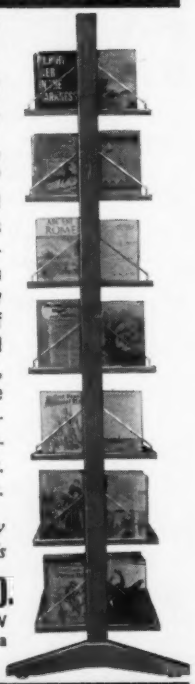
Circle **OV-243** on reply card, last page

SECURITY
MAIL BAGS
DELUXE ALL LEATHER
or CANVAS & LEATHER
WITH
MOLDED RUBBER BOTTOMS
Top quality Mail Bags in sizes and prices to meet every office need! Used by nationally known organizations coast to coast.

Write for literature and prices to:
CAN-PRO Corp
34 E. McWILLIAMS ST.
FOND DU LAC, WIS.

Circle **OV-244** on reply card, last page

AMESTACK
A NEW Concept in Library Shelving



New AMESTACK Steel Library Shelving provides that feeling of spaciousness so important in contemporary library designs. Wire shelf brackets afford ideal display for books, eliminate the box-like appearance of conventional shelving. Free-standing base; 4′ shelves. Many colors available.

Write today for full details

W. R. AMES CO.
Dept. OV
Milpitas, California

Since 1910

AMES — *Representatives in Principal Cities*

Full details on materials and fabrication, locking functions, matching outside trims, accessories and a full color presentation of each available color on both bronze and aluminum finish exit devices are included. Von Duprin Div., Vonnegut Hardware Co., 402 W. Maryland St., Indianapolis 25, Ind.

Circle **OV-415** on reply card, last page

College Textbook Catalog

Bobbs-Merrill Co.'s 1961–62 college textbook catalog takes in the fields of Anthropology, Education, English, History, Literature, Philosophy, Political Science, Religion, and Sociology. The Bobbs-Merrill Co., Inc., 1720 E. 38 St., Indianapolis 6, Ind.

Circle **OV-416** on reply card, last page

Chalkboards, Bulletin Boards

"Catalog 61" describes and illustrates the full line of Claridge chalkboards, bulletin boards, aluminum trim and accessories. A wide variety of specialty items, such as bulletin board cabinets, trophy and display cases, directory boards, portable chalkboards and bulletin boards, mathematics teaching aids, are also featured. 32 pages in full color. Claridge Products & Equipment Inc., Box 278, Harrison, Ark.

Circle **OV-417** on reply card, last page

Dimmer Control Systems

Stage lighting manufacturer, Century Lighting, has just announced a new line of U.L.-approved dimmers with silicon-controlled rectifiers. These are described in detail in the new Century Dimmer Control Systems Data Book, complete with specifications, illustrations and diagrams. Century Lighting, 521 W. 43 St., New York, N. Y.

Circle **OV-418** on reply card, last page

Maintenance Posters in Spanish

School administrators can now communicate more effectively with their Spanish speaking custodians on common maintenance situations through a series of specially prepared maintenance posters. Each poster, written in Spanish, features pictures of common cleaning situations. Available from National Sanitary Supply Assn., 159 N. Dearborn St., Chicago 1, Ill.

Circle **OV-419** on reply card, last page

Rebound Tumbling

A completely new line of rebound tumbling equipment for schools, colleges, and recreation centers has been introduced by Nissen. All Spartan Trampoline units are portable; conveniently fold for easy storage. Nissen Trampoline Co., Cedar Rapids, Iowa.

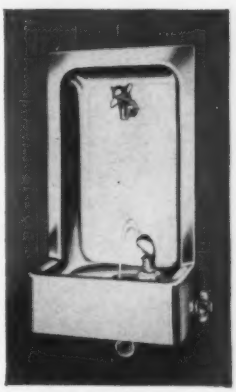
Circle **OV-420** on reply card, last page

The gleaming beauty of stainless steel provides the modern touch

Stainless Steel, the modern metal of the sixties, is used in this smartly-styled recess fountain by Halsey Taylor.

It is highly favored for installations in foyers, corridors and offices, providing the lifetime beauty and service of stainless steel and the dependability and health-safety of Halsey Taylor design.

The Halsey W. Taylor Co., Warren, Ohio



Here is another Halsey Taylor Stainless Steel wall-type..a semi-recessed unit.

Halsey Taylor®

Write for latest catalog, or see Sweet's or the Yellow Pages

THIS MARK OF LEADERSHIP IDENTIFIES THE MOST COMPLETE LINE OF MODERN DRINKING FIXTURES

Circle **OV-246** on reply card, last page

GOUGLER

RED DOT • KEYLESS PADLOCKS • THAT CLICK

BETTER REASONS TO BUY

No need to read numbers

FASTER, SAFER EASIER TO OPERATE

Just count the clicks!

LESS MECHANICAL FAILURES
Fewer wearing parts

Can operate in darkness

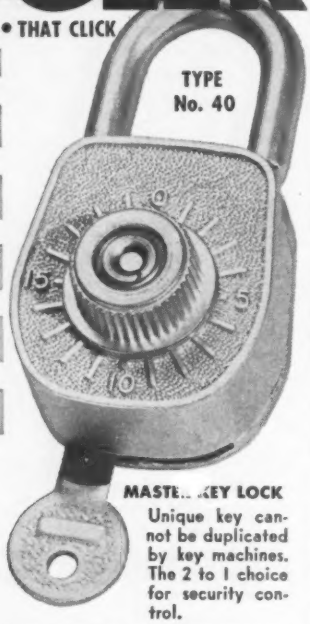
LONG LASTING QUALITY
Sturdy, non-corrosive

Liked by Students.

GREATER SECURITY BETTER MASTER CONTROL

Every lock is registered

GUARANTEED TWO YEARS
Take Two Years To Pay



MASTE.. .KEY LOCK

Unique key cannot be duplicated by key machines. The 2 to 1 choice for security control.

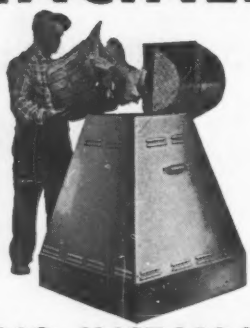
BUY GOUGLER NOW! TWO YEARS TO PAY!
DELIVERED ON DATE YOU SPECIFY

Write on letterhead for Free Sample, prices and "no-interest" Credit plan.

GOUGLER KEYLESS LOCK CO.
711 Lake St. Kent, Ohio

Circle **OV-247** on reply card, last page

LOW COST INCINERATOR



BURNS TRASH SAFELY OUTDOORS

Only $110.00 COMPLETE

NO INSTALLATION COST

Burn wrappings, sweepings, papers, cartons, packing, rags, food waste, safely outdoors. Scientific draft control ends fire hazards of flying ash, sparks, burning blowing papers. Burns damp, green, or dry refuse to fine ash in any weather. Minimizes smoke and smell, needs no watching. Safe for use 10′ from buildings. Stands 52″ high x 35″ square at base. 10 bushel burning capacity. Complete with hinged hood, ash pan base and grate and cleanout door. Made of aluminized steel (molten aluminum bonded to steel) with replaceable inner steel panel construction for long life. Shipped assembled—weight 170 lbs. Only $110.00 F.O.B. Cleveland. Satisfaction guaranteed. Other sizes available.

Write for **FREE** *Folder*

ALSTO COMPANY

Dept. 10 **4007 Detroit Ave. Cleveland 13, Ohio**

Circle **OV-248** on reply card, last page

SHAMROCKS ARE A JANITOR'S BEST FRIEND

(and a better buy for schools)

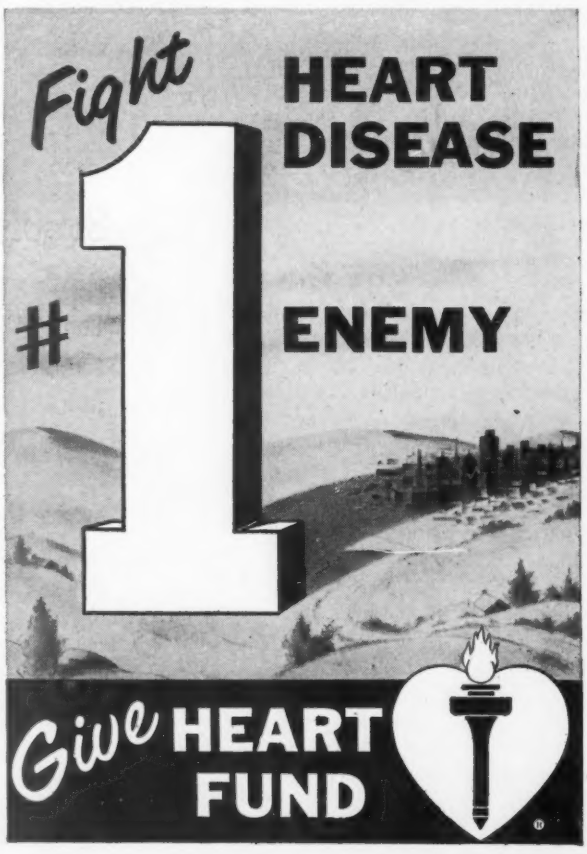
Big capacity, light weight and easy mobility make Shamrock Janitor Wagons a favorite with maintenance personnel. Their low cost and long-life construction win the approval of cost-conscious superintendents, purchasing agents. Sturdy collapsible steel frame; removable canvas bags easily replaceable. Furnished in white and O.D. flame resistant duck. A choice of styles and caster arrangements. Write for prices.

NO. 86 JANITOR CART

SOLD THROUGH SHAMROCK JOBBERS EVERYWHERE

MANUFACTURED IN MADISON, IND. BY

MEESE, INC.



Use This Reader Service Card For More Information on Products and Services

The business reply card covers products and services referred to in both advertisements and editorial reviews in this issue. The key (OV number) is found above the advertisement or following the editorial listing in the body of the magazine.

If further information concerning any of these products is desired, it will be sent without charge or obligation. Simply circle the identifying numbers on the back of the business reply card and mail it to us.

INDEX TO ADVERTISERS — August, 1961

Page

A

Airkem, Inc. 29
Agency: Persons Advertising Inc.

Alsto Company 74
Agency: Baisch Advertising Agency

American City Bureau 75
Agency: Bozell and Jacobs, Inc.

American Lock Company, Junkunc Brothers 56
Agency: Admakers

Ames Co., W. R. 72
Agency: Hoefer, Dieterich and Brown Inc.

Astro-Dome Incorporated 26
Agency: Ted Witter Adv. Agency

Audiotronics 52
Agency: Ad/Mil

B

Babbitt, Inc., B. T. 23, 52, 72
Agency: Geyer, Morey, Madden and Ballard

Bausch & Lomb Incorporated 66, 67
Agency: Wolff Associates, Inc.

Beckley-Cardy 70
Agency: R. E. Clark Adv. Agency

Berlin Chapman Co. 68
Agency: R. C. Breth Inc.

Beseler Company, Charles 28
Agency: Marwel Advertising

Breuer Electric Mfg. Co. 10
Agency: O'Grady, Andersen & Gray

Brown Company, The M. D. 56

C

Can-Pro Corp. 72
Agency: Geer-Murray, Inc.

Carrier Air Conditioning Company 8, 9
Agency: N. W. Ayer & Son, Inc.

E

Eastman Kodak Company 76
Agency: The Rumrill Company, Inc.

Executone, Inc. 16, 17
Agency: G. M. Basford Adv.

F

Fabri-Form Company, The 69
Agency: Wheeler, Kight & Gainey, Inc.

FIRST CLASS
PERMIT NO. 280
SEC. 34.9 P. L. & R.
NEW YORK, N. Y.

BUSINESS REPLY CARD
No Postage Stamp Necessary If Mailed in the United States

POSTAGE WILL BE PAID BY

OVERVIEW
470 PARK AVE. SOUTH
NEW YORK 16, N. Y.

OVERVIEW — August, 1961
470 Park Ave. South, New York 16, N. Y.

Please ask the manufacturers, indicated by the numbers I have circled, to send further literature and information provided there is no charge or obligation.

ADVERTISEMENTS

201	202	203	204	205	206	207	208	209	210
211	212	213	214	215	216	217	218	219	220
221	222	223	224	225	226	227	228	229	230
231	232	233	234	235	236	237	238	239	240
241	242	243	244	245	246	247	248		

EDITORIAL PRODUCT PREVIEW

301	302	303	304	305	306	307	308	309	310
311	312	313	314	315	316	317	318	319	320
321	322	323	324	325	326	327	328	401	402
403	404	405	406	407	408	409	410	411	412
413	414	415	416	417	418	419	420		

Also send literature on _____

NAME _____ TITLE _____

INSTITUTION _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

A

Page

G

Georpres Wringer, Inc. 18
Agency: Denham and Company

Gougler Keyless Lock Co. 74
Agency: Fred Bock Adv. Co.

Graflex, Inc. 2, 3
Agency: Hutchins Advertising Co., Inc.

H

H-O-N Co., The 61
Agency: Clem T. Hanson Co.

Page

I

Industrial Combustion Inc. 56
Agency: William Eisner & Associates Adv. Agency

Institute for Personal Development 5

K

Krueger Metal Products 15
Agency: Jack C. Wemple Advertising

Page

M

Master Lock Company 62
Agency: Scott, Inc. Advertising Agency

McNeff Industries, Inc. 50
Agency: Ted Workman Adv., Inc.

Meese, Inc. 74
Agency: Zimmer, McClaskey, Inc., Adv.

Michaels Art Bronze Company, The 47
Agency: Seery & Company

Minnesota Mining and Manufacturing Company 30
Agency: Batten, Barton, Durstine & Osborn

Mitchell Manufacturing Company 53
Agency: Charles F. Pearson & Assoc., Adv.

Moore, Inc., P. O. 50
Agency: The Gerald F. Selinger Co., Adv.

Multi-Clean Products, Inc. 27
Agency: Colle & McVoy Adv. Agency

P

Pittsburgh Plate Glass Co. 24, 25
Agency: Maxon, Inc.

Porter Athletic Equipment Company 51
Agency: Reuland Advertising Agency

Pratt and Lambert, Inc. 6
Agency: The Rumrill Co., Inc.

R

Ryan Landscaping Equipment Co. 18
Agency: Colle & McVoy Adv. Agency

S

Structural Clay Products Institute 14
Agency: Henry J. Kaufman & Associates

T

Taylor Co., The Halsey W. 73
Agency: William Cohen Advertising

U

Underwood Corporation 13
Agency: Geyer, Morey, Madden & Ballard, Inc.

W

Ward Body Works, Inc. 49
Agency: Ted Workman Advertising, Inc.

Warvel Products Corp. 71
Agency: Williams Advertising Design

Western Waterproofing Co. 71
Agency: Batz, Hodgson, Neuwoehner, Inc.

OVERVIEW August, 1961

470 Park Ave. South, New York 16, N. Y.

Please ask the manufacturers, indicated by the numbers I have circled, to send further literature and information provided there is no charge or obligation.

ADVERTISEMENTS

201	202	203	204	205	206	207	208	209	210
211	212	213	214	215	216	217	218	219	220
221	222	223	224	225	226	227	228	229	230
231	232	233	234	235	236	237	238	239	240
241	242	243	244	245	246	247	248		

EDITORIAL PRODUCT PREVIEW

301	302	303	304	305	306	307	308	309	310
311	312	313	314	315	316	317	318	319	320
321	322	323	324	325	326	327	328	401	402
403	404	405	406	407	408	409	410	411	412
413	414	415	416	417	418	419	420		

Also send literature on _____

_____

NAME _____ **TITLE** _____

INSTITUTION _____

ADDRESS _____

CITY _____ **ZONE** _____ **STATE** _____

B

FIRST CLASS
PERMIT NO. 280
SEC. 34.9 P. L. & R.
NEW YORK, N. Y.

BUSINESS REPLY CARD
No Postage Stamp Necessary If Mailed in the United States

POSTAGE WILL BE PAID BY

OVERVIEW
470 PARK AVE. SOUTH
NEW YORK 16, N. Y.

Circle **OV-202** on reply card, last page

Raising money today is harder than ever before. There's not a person you know who hasn't been approached by committees bombarded through the mails or tagged on the streets. So just remember when your School, College or University sets out to raise funds it's easier and easier for people you ask for money to say, "No."

That's why so many Educational Institutions have turned over the ever-present problem of organizing fund-raising appeals to the American City Bureau. Since 1913 our experienced staff has been the guiding and driving force in more than 3,600 campaigns.

Would you like to know how this experience can help your School raise the money you need? Just call or write our nearest office. Without cost to you, we'll make a study of *your* special problems and prepare an individual plan to meet them.

Since January 1, 1960, Educational Institutions the AMERICAN CITY BUREAU has been privileged to serve include:

American International College
Springfield, Mass.

Augustana College
Sioux Falls, S. D.

Ball State Teachers College
Muncie, Ind.

Bethany Biblical Seminary
Chicago, Illinois

Bishop Noll Institute & High School
East Chicago, Ill.

College of Charleston
Charleston, S.C.

Evansville College
Evansville, Ind.

Ft. Wayne Bible College
Ft. Wayne, Ind.

Jacksonville University
Jacksonville, Fla.

Juniata College
Huntingdon, Pa.

Lutheran High School
Los Angeles, Calif.

Montana State College
The Endowment & Research Foundation
Bozeman, Mont.

North Central College
Naperville, Ill.

Northeastern University
Boston, Mass.

Springfield College
Springfield, Mass.

Suomi College
Hancock, Mich.

University of Vermont
Burlington, Vt.

West Virginia Wesleyan
Buckhannon, W. Va.

AMERICAN CITY BUREAU

Professional Fund-Raising Counsel for Almost Half-a-Century

Chicago 1, Ill. 3520 Prudential Plaza | New York 16, N.Y. 386 Park Avenue South | Atlanta 9, Ga. 1375 Peachtree St. Bldg. | Houston 25, Texas 1202 Prudential Bldg. | Sacramento 25, Calif. 451 Parkfair Drive

Founding Member American Association of Fund-Raising Counsel

Circle **OV-203** on reply card, last page

"At our elementary school we emphasize both . . . books and motion pictures."

Says Mr. Alfred Martin, Principal, Parkway Elementary School, Paramus, N. J., selected by the American Association of School Administrators for its exhibit of outstanding school designs:

"Our objective is to introduce as many cultural experiences as possible to elementary school children.

"Consequently, we have a full-time librarian managing our well-stocked library, and we run a full weekly schedule of classroom motion pictures.

"By our emphasis on both books and movies, we gain the interest of the teacher who, in turn, makes them important to her pupils.

"Time was when our Audio-Visual movie program was threatened by teachers apprehensive about using projectors; this has been overcome. They lost their fears when they began using our Kodak Pageant Sound Projector. They and their pupils operate this Kodak projector with no problems."

The Kodak Pageant 16mm Sound Projector contributes as much as the film toward the success of movies in an A-V program, because this projector does nothing to discourage the teacher.

All parts are permanently attached; nothing to assemble but the audience. Threading the film is a matter of following a red arrow printed on the projector. No lubrication to worry about —the Kodak Pageant is permanently oiled when it's built.

Perhaps up-to-date and easy-to-use projection equipment can help make your own Audio-Visual program a more effective one. A Kodak A-V dealer in your locality will demonstrate, without obligation, at your request. Or, if you prefer, write for Bulletin V3-22 which gives full details.

Kodak Pageant Projector 〉 **EASTMAN KODAK COMPANY,** Dept. 8-V, Rochester 4, N. Y.